# DOCUMENTATION OF THE DETAIL NATALITY TAPE FILE FOR 2001 DATA

Populations included in this documentation are estimated based on the 2000 census; state-specific populations based on the 2000 census are not yet available; see Technical Appendix.

#### **Public Use Data Tape Documentation - Natality Detail 2001 Data**

This tape documentation was prepared in the Division of Vital Statistics. Manju Sharma and Vanetta Harrington of the Systems, Programming, and Statistical Resources Branch were responsible for developing the natality documentation.

Paul Sutton of the Reproductive Statistics Branch prepared the Technical Appendix. The Registration Methods Section and the Data Acquisition and Evaluation Branch provided consultation to State Vital Statistics offices regarding collection of birth certificate data.

Questions on the documentation or general questions concerning the natality file should be directed to the Systems, Programming, and Statistical Resources Branch, Division of Vital Statistics, NCHS, 3311 Toledo Road, Room 7318, Hyattsville, MD 20782-2003 (301-458-4195).

Questions concerning the Technical Appendix or substantive questions concerning the natality data should be directed to the Reproductive Statistics Branch, Division of Vital Statistics, NCHS, 3311 Toledo Road, Room 7318, Hyattsville, MD 20782-2003 (301-458-4111).

#### Documentation of the Detail Natality Data File for 2001 Data

Since 1985 natality statistics for all States and the District of Columbia have been based on information from the total file of records. The information is received on computer data tapes coded by the States and provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program. NCHS receives the data for this file from the registration offices of all States, the District of Columbia, and New York City. Natality data for Puerto Rico, Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands (referred to as Northern Marianas) are included as a separate data-set in the public-use file.

Natality data for the United States are limited to births occurring within the United States to U.S. residents and nonresidents. Births to nonresidents of the United States are excluded from all tabulations by place of residence. Births occurring to U.S. citizens outside the United States are not included in this file. Natality data for Puerto Rico, Virgin Islands, Guam, American Samoa and Northern Marianas are limited to births occurring within the respective territories.

Effective January 1, 1989, a revised U.S. Standard Certificate of Live Birth replaced the 1978 revision. The 1989 revision provides a wide variety of new information on maternal and infant health characteristics, representing a significant departure from previous versions in both content and format. For a more detailed discussion of the revised and new items, refer to the technical appendix part of this document.

The Office of Management and Budget revised its designation of metropolitan statistical areas based on figures from the 1990 Census. Effective with the 1990 data file, NCHS has been using these new definitions and codes as indicated in the listing of 320 Metropolitan Statistical Areas (MSA's), Primary Metropolitan Statistical Areas (PMSA's), and New England County Metropolitan Areas (NECMA'S) included in this documentation. There are also 20 Consolidated Metropolitan Statistical Areas (CMSA's), which are made up of PMSA's. Because other geographic changes based on 1990 Census became effective with 1994 data file, the metropolitan statistical area destinations were updated as well. Effective with the 1994 data-file there are 311 MSA's, PMSA's, and NECMA'S and 18 CMSA's as indicated in the listing included in this documentation.

NCHS has adopted a new policy on release of vital statistics unit record data files. This new policy was implemented for the 1989 vital event files to prevent the inadvertent disclosure of individuals and institutions. As a result, the files for 1989 and later years do not contain the actual day of the birth or the dates of birth of the mother or father. The geographic detail is also restricted; only counties and cities of 100,000 or more population based on the 1990 Census, as well as metropolitan areas of 100,000 or more population based on the 1990 Census, are identified.

## **Included in this document are:**

- 1. List of data elements and tape locations.
- 2. Machine/File/Data Characteristics.
- 3. Detail Record Layout.
- 4. Geographic Code Outline.
- 5. Metropolitan Statistical Areas as adapted for use by NCHS/DVS.
- 6. Technical Appendix.

#### **SYMBOLS USED IN TABLES**

Symbol	Explanation
	Data not available
•••	Category not applicable
-	Quantity zero
0.0	Quantity more than 0 but less than 0.05
*	Figure does not meet standards of reliability or precision

### List of Data Elements and Tape Locations

	Data Items	<u>Locations</u>
1.	General a. Data year b. Record type c. Resident status	1-4 5 6
2.	Occurrence a. NCHS State b. Expanded NCHS State c. NCHS County d. Population size - county e. Division f. Region g. FIPS State h. FIPS County	16-17 14-15 18-20 26 12 11 21-22 23-25
3.	Residence a. NCHS State b. Expanded NCHS State c. NCHS County d. NCHS City e. Population size - city f. Population size - county g. NCHS PSMA/MSA h. Met/Nonmet county I. Division j. Region k. FIPS State l. FIPS County m. FIPS Place n. CMSA o. FIPS PSMA/MSA	32-33 30-31 34-36 37-39 40 58 347-349 41 28 27 42-43 44-46 47-51 52-53 54-57
4.	Prenatal Care a. Month began b. Number of visits c. Adequacy of care recode	106-109 110-113 93
5.	Child a. Sex b. Number at delivery c. Birthweight d. Apgar score e. Gestation f. Month/year of birth g. Day of week of birth	188-189 201 193-199 205-207 181-187,208-209 172-173,176-179

## List of Data Elements and Tape Locations

	Data :	<u>Items</u>	Locations				
6.	Mother						
	a.	Age	68-76,91-92				
	b.	Race	79-82				
	c.	Marital status	86-87				
	d.	Education	83-85				
	e.	Place of birth	88-90				
	f.	Hispanic origin	77-78				
7.	Pregna	ancy History					
	a.	Born alive, now living	94-95				
	b.	Born alive, now dead	96-97				
	c.	Other terminations	98-99				
	d.	Total birth order	103-105				
	e.	Live birth order	100-102				
8.	Father	r					
	a.	Age	154-157,166-167				
	b.	Race	160-162				
	c.	Hispanic origin	158-159				
9.	Other	Items					
	a.	Residence reporting flags	307-326				
	b.	Attendant at birth	10				
	c.	Place of delivery	8-9				
	d.	Interval since last live birth	128-132				
10.	Medica	al and Health Data					
	a.	Method of delivery	217-222,224				
	b.	Medical risk factors	225-241				
	c.	Other risk factors					
		Tobacco	242-245				
		Alcohol	246-249				
		Weight gain during pregnancy	250-252				
	d.	Obstetric procedures	253-259				
	e.	Complications of labor and/or					
	_	delivery	260-275				
	f.	Abnormal conditions of the					
		newborn	276-284				
	g.	Congenital anomalies	285-306				

#### Machine/File/Data Characteristics:

#### ALL DATA SETS:

1. Machine used: IBM/3081/K

2. Language used: PL/I

3. File organization:
4. Record format:
5. Record mode:
6. Code scheme:

One file, multiple reels
Blocked, fixed format
IBM/EBCDIC 8-bit code
Numeric/Alphabetic/Blanks

7. Last block: May be a short block

8. Record length: 350 9. Blocksize: 32550

#### U.S. DATA SET:

1. Record count:

2. Data counts: ALL BIRTHS:

a. By occurrence: 4,031,531 b. By residence: 4,025,933 c. To foreign residents: 5,598

#### PUERTO RICO, VIRGIN ISLANDS, GUAM, AMERICAN SAMOA, AND NORTHERN MARIANAS DATA SET

1. Record count: 64,440

#### PUERTO RICO:

2. Data counts: ALL BIRTHS:

a. By occurrence: 55,983

#### VIRGIN ISLANDS:

1. Record count:

2. Data counts: ALL BIRTHS:

a. By occurrence: 1,770 b. By residence: 1,669

**GUAM:** 

1. Record count:

2. Data counts: ALL BIRTHS:

a. By occurrence: 3,584 b. By residence: 3,564

#### AMERICAN SAMOA:

1. Record count:

2. Data counts: ALL BIRTHS:

a. By occurrence: 1,655

1. Record count:

2. Data counts: ALL BIRTHS:

a. By occurrence: 1,448
b. By residence: 1,449

	Tape <u>Location</u>	Field <u>Size</u>	<u> Item</u>	and Co	ode Outline
1-4	4		<u>DATAYEAR</u> Year Birth o	of Chi	<u>ld (Data Year)</u>
			2001		2001
5	1		RECTYPE Record Type		
			1	• • •	Resident: State and county of occurrence and residence are the same.
			2	• • •	Nonresident: State and/or county of occurrence and residence are different.
6	1		<u>RESTATUS</u> <u>Resident Sta</u>	atus	
			United State	es occi	urrence
			1	• • •	RESIDENTS: State and county of occurrence and residence are the same.
			2	• • •	INTRASTATE NONRESIDENTS: State of occurrence and residence are the same, but county is different.
			3	• • •	INTERSTATE NONRESIDENTS: State of occurrence and residence are
			4		different, but both are in the U.S. FOREIGN RESIDENTS: State of occurrence is one of the 50 States or the District of Columbia, but place of residence of mother is outside of the U.S.
			Puerto Rico	occur	rence RESIDENTS: Territory and county equivalent of occurrence and
			2		residence are the same. INTRATERRITORY NONRESIDENTS: Territory of occurrence and
			3		residence are the same, but county equivalent is different. INTERTERRITORY NONRESIDENTS: Territory of occurrence and residence are different, but both
			4	•••	are a Territory. FOREIGN RESIDENTS: Occurred in Puerto Rico to a resident of any other place.

	Tape <u>Location</u>	Field <u>Size</u>	Item and Co	de Outline
6	1		RESTATUS Resident Status (	
			Virgin Islands oc	<u>currence</u>
			1	RESIDENTS: Territory and county equivalent of occurrence and residence are the same.
			2	INTRATERRITORY  NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.
			3	INTERTERRITORY NONRESIDENTS: Territory of occurrence and residence are different, but both are a Territory.
			4	FOREIGN RESIDENTS: Occurred in the Virgin Islands to a resident of any other place.
			Guam occurrence	
			1	RESIDENTS: Occurred in Guam to a resident of Guam or to a resident of the U.S.
			3	INTERTERRITORY  NONRESIDENTS: Territory of occurrence and residence are
			4	different, but both are a Territory FOREIGN RESIDENTS: Occurred in Guam to a resident of any place other than Guam or of the U.S.
			American Samoa oc	<u>currence</u>
			1	RESIDENTS: Territory and county equivalent of occurrence and residence are the same.
			2	INTRATERRITORY  NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.
			3	INTERTERRITORY NON RESIDENTS: Territory of occurrence and residence are different, but both are a Territory.
			4	FOREIGN RESIDENTS: Occurred in the American Samoa to a resident of any other place.

	Tape <u>Location</u>	Field <u>Size</u>	<u> Item</u>	and Co	de Outline
6	1		RESTATUS Resident		
			Northern	Marian	as occurrence
			2		RESIDENTS: Territory and county equivalent of occurrence and residence are the same. INTRATERRITORY NONRESIDENTS: Territory of occurence and residence are the same, but county equivalent is different.
			3		NONRESIDENTS: Territory of occurrence and residence are different, but both are a Territory.
			4	•••	FOREIGN RESIDENTS: Occurred in the Northern Marianas to a resident of any other place.
7	1		RECWT Record Weig	<u>ıht</u>	
					Constant - as of the 1985 data year, this file contains data on a 100-percent basis from all reporting areas.
8	1		<u>PLDEL</u> <u>Place or Fa</u>	cility	of Birth
			1 2 3 4 5 9		Hospital Freestanding Birthing Center Clinic or Doctor's Office A Residence Other Unknown or Not Stated
9	1		PLDEL3 Place or Fa	cility	of Birth Recode
			1 2 3	• • • • • • • • • • • • • • • • • • • •	In Hospital Not in a Hospital Unknown or Not Stated
10	1		BIRATTND Attendant a	t Birt	<u>h</u>
			1 2 3 4		Doctor of Medicine (M.D.) Doctor of Osteopathy (D.O.) Certified Nurse Midwife (C.N.M.) Other Midwife

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		5 Other 9 Unknown or Not Stated
11-26	16	NOCCUR Place of Occurrence
11-13	3	RDSSCOCC Region, Division, and State Subcode of Occurrence
11	1	REGNOCC Region of Occurrence
12	1	DIVOCC Division of Occurrence
13		STSUBOCC State Subcode of Occurrence  States are coded within division and the structure is designed to sequence the States as they appear in NCHS publications.   Not applicable: P.R., V.I., A.S., Guam or M.P. occurrence   Northeast  New England  New England  New Hampshire  New Hampshire  Vermont  Massachusetts  Rhode Island  Connecticut  Middle Atlantic  New York  New York  New York  New Jersey  New Jersey  Pennsylvania  MIDWEST  State Subcode of Occurrence
		3 Illinois 4 Michigan 5 Wisconsin 4 West North Central 1 Minnesota 2 Iowa 3 Missouri 4 North Dakota 5 South Dakota 6 Nebraska 7 Kansas 3 SOUTH

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		5 <u>South Atlantic</u> 1 Delaware 2 Maryland
13		1 STSUBOCC  State Subcode of Occurrence (Cont'd)  3 District of Columbia 4 Virginia 5 West Virginia 6 North Carolina
		7 South Carolina 8 Georgia 9 Florida 6 <u>East South Central</u> 1 Kentucky 2 Tennessee
		3 Alabama 4 Mississippi 7 West South Central 1 Arkansas 2 Louisiana 3 Oklahoma 4 Texas
		4 WEST  8 Mountain  1 Montana  2 Idaho  3 Wyoming  4 Colorado
		5 New Mexico 6 Arizona 7 Utah 8 Nevada 9 <u>Pacific</u> 1 Washington
14-15	2	2 Oregon 3 California 4 Alaska 5 Hawaii
		Expanded State of Occurrence  This item is designed to separately identify New York city records from other New York State records.
		United States  01 Alabama  02 Alaska  03 Arizona  04 Arkansas  05 California  06 Colorado  07 Connecticut

Tape Location	Field <u>Size</u>	<u>It</u>	em and Co	de Outline
		08 09 10 11 12		Delaware District of Columbia Florida Georgia Hawaii Idaho
14-15	2	14 STNATEXP Expanded	 State of	Illinois Occurrence (Cont'd)
		15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 50 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 51 52 52 53 53 54 54 54 54 54 54 54 54 54 54 54 54 54		Indiana Iowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York New York city North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming
		Puerto R	<u>ico</u> 	Puerto Rico
		Virgin I:		Virgin Islands

<u>Guam</u>

Tape	Field
Location	<u>Size</u>

#### Item and Code Outline

55 ... Guam

American Samoa

62 ... American Samoa

Northern Marianas

63 ... Northern Marianas

## 16-17 2 <u>STATENAT</u> State of Occurrence

#### <u>United States</u> ... Alabama 01 ... Alaska 02 03 ... Arizona ... Arkansas 04 ... California 05 06 Colorado . . . 07 Connecticut . . . 80 Delaware . . . 09 District of Columbia . . . 10 Florida . . . ... Georgia 11 12 ... Hawaii ... Idaho 13 14 Illinois . . . 15 Indiana . . . 16 Iowa . . . Kansas 17 . . . 18 Kentucky . . . ... Louisiana 19 20 ... Maine 21 ... Maryland ... Massachusetts 22 23 Michigan . . . 24 . . . Minnesota 25 . . . Mississippi 26 Missouri . . . 27 Montana . . . 28 Nebraska . . . 29 Nevada . . . 30 ... New Hampshire 31 New Jersey . . . 32 New Mexico . . . 33 New York . . . North Carolina 34 . . . 35 North Dakota . . . 36 Ohio . . . 37 Oklahoma . . . ... Oregon 38 39 ... Pennsylvania Rhode Island South Carolina 40 . . . 41 . . . 42 South Dakota . . . 43 Tennessee

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codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		44 Texas 45 Utah 46 Vermont 47 Virginia 48 Washington 49 West Virginia 50 Wisconsin 51 Wyoming
16-17		2 <u>STATENAT</u> State of Occurrence (Cont'd)
		Puerto Rico 52 Puerto Rico
		<u>Virgin Islands</u> 53 Virgin Islands
		Guam 54 Guam
		American Samoa 61 American Samoa
		Northern Marianas 62 Northern Marianas
18-20	3	CNTYNAT County of Occurrence
		O01-nnn Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county with a population of 100,000 or more in 1990. (Note: To uniquely identify a county, both and State and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document.  999 County of less than 100,000
		population
21-25	5	FIPSOCC Federal Information Processing Standards (FIPS) Geographic Codes (Occurrence)  Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference

Tape Field Location Size

Item and Code Outline

Some Geographic codes have changed to reflect the results of the 1990 Census.  $\,$ 

Tape <u>Location</u>	Field <u>Size</u>	Item and Code	<u>Outline</u>	
21-22	2	STOCCFIP State of Occur	rence (FIPS)	
		United States		
		01		
		02		
		04		
		05		
		06		
		08		
		09		
		10		
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Tape <u>Location</u>	Field <u>Size</u>	Item and Code Ou	<u>tline</u>
21-22		2 State of Occurren	STOCCFIP ce (FIPS) (Cont'd)
	53	50 51 Washi 54 55	Vermont Virginia ngton West Virginia Wisconsin Wyoming
		Puerto Rico 72	Puerto Rico
		<u>Virgin Islands</u> 78	Virgin Islands
		<u>Guam</u> 66	Guam
		American Samoa 60	American Samoa
		Northern Marianas 69	Northern Marianas
23-25	3	CNTOCFIP County of Occurre	nce (FIPS)
		001-nnn	Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State. (Note: To uniquely identify a county, both the State and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further
		999	back in this document County of less than 100,000 population
26	1	CNTOCPOP Population Size o	f County of Occurrence
		Based on the resu	lts of the 1990 Census
		0	County of 1,000,000 or more County of 500,000 to 1,000,000

Tape Location	Field <u>Size</u>	Item and Code Outline
		2 County of 250,000 to 500,000 3 County of 100,000 to 250,000
27-58	32	NRESID Place of Residence  Refer to the Geographic Code Outline further back in this document for a detailed list of areas and
		codes. Some Geographic codes have changed to reflect the results of the 1990 Census.
27-29	3	RDSCRES Region, Division, and State Subcode of Residence
27	1	REGNRES Region of Residence
28	1	<u>DIVRES</u> Division of Residence
29	1	STSUBRES State Subcode of Residence

States are coded within Division and the code structure is designed to sequence the States as they appear in NCHS publications.

#### APPLICABLE TO U.S. ONLY

000		Foreign Residents
1		NORTHEAST
1		<u>New England</u>
1		Maine
2		New Hampshire
2		Vermont
4		Massachusetts
5		Rhode Island
6		Connecticut
2		Middle Atlantic
_ 1		New York
2		New Jersey
3	• • •	Pennsylvania
2	• • •	MIDWEST
	• • •	
3	• • •	East North Central
1	• • •	Ohio
2	• • •	Indiana
3		Illinois
4		Michigan
5		Wisconsin
4		<u>West North Central</u>
1		Minnesota
2		Iowa
3		Missouri
4		North Dakota

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Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
29	1	5 South Dakota 6 Nebraska 7 Kansas 3 SOUTH 5 South Atlantic 1 Delaware 2 Maryland  STSUBRES State Subcode of Residence (Cont'd)
		Jistrict of Columbia Virginia West Virginia North Carolina South Carolina South Carolina Secongia Seco
30-31	2	STRESEXP Expanded State of Residence  This item is designed to separately identify New York City records from other New York State records.
		United States occurrence
		01 Alabama 02 Alaska 03 Arizona 04 Arkansas

Tape Location	Field <u>Size</u>	Item and Code Outline
30-31	2	05 California 06 Colorado 07 Connecticut 08 Delaware 09 District of Columbia 10 Florida 11 Georgia 12 Hawaii 13 Idaho  STRESEXP
		Expanded State of Residence (Cont'd)  14 Illinois 15 Indiana
		16 Iowa 17 Kansas 18 Kentucky 19 Louisiana
		20 Maine 21 Maryland 22 Massachusetts 23 Michigan
		24 Minnesota 25 Mississippi 26 Missouri 27 Montana 28 Nebraska
		29 Nevada 30 New Hampshire 31 New Jersey 32 New Mexico
		33 New York 34 New York City 35 North Carolina 36 North Dakota
		37 Ohio 38 Oklahoma 39 Oregon 40 Pennsylvania 41 Rhode Island
		42 South Carolina 43 South Dakota 44 Tennessee
		45 Texas 46 Utah 47 Vermont 48 Virginia 49 Washington
		50 West Virginia 51 Wisconsin 52 Wyoming 53-58,60, Foreign Residents
		62,63 53 Puerto Rico 54 Virgin Islands

Tape Location	Field <u>Size</u>	Item and Code O	utline	
		55 62 56 57 58 60	American 63 Canada Cuba Mexico	. Guam n Samoa Northern Marianas er of the world
30-31	2	<u>STRESEXP</u> Expanded State o	of Residence	e (Cont'd)
		Puerto Rico occu 53 01-52,54-58, 60,62,63	irrence	Puerto Rico  Foreign residents: Refer to U.S. for specific code structure.
		Virgin Islands of 54 01-53,55-58, 60,62,63	occurrence 	Virgin Islands  Foreign residents: Refer to U.S. for specific code structure.
		Guam occurrence 55 01-52		Guam U.S. resident is also considered a resident of Guam.
		53-54,56-58, 60,62,63		Foreign residents: Refer to U.S. for specific code structure.
		American Samoa o 62 01-52	ccurrence 	American Samoa U.S. resident is also considered a resident of American Samoa .
		53-58,60,63	•••	Foreign residents: Refer to U.S. for specific code structure.
		<u>Northern Mariana</u> 63 01-52	occurrence	<pre>ce   Northern Marianas   U.S. resident is also   considered a resident of   Northern Marianas.</pre>
		53-58,60,62		Foreign residents: Refer to U.S. for specific code structure.

Tape Location	Field <u>Size</u>	<u>Item and</u>	Code Outline	
32-33	2	STATERES State of Re	<u>esidence</u>	
			tes occurrence	
		01	Alabama	
		02	Alaska	
		03	Arizona	
		04	Arkansas	
		05	California	
		06	Colorado	
		07	Connecticut	
		08	Delaware	
		09	District of Columbia	ì
20.22		10	Florida	
32-33		2	STATERES	
		<u>State of R</u>	Residence (Cont'd)	
		1.1	~ '	
		11	Georgia	
		12	Hawaii	
		13	Idaho	
		14	Illinois	
		15	<u>I</u> ndiana	
		16	Iowa	
		17	Kansas	
		18	Kentucky	
		19	Louisiana	
		20	Maine	
		21	Maryland	
		22	Massachusetts	
		23	Michigan	
		24	Minnesota	
		25	Mississippi	
		26	Missouri	
		27	Montana	
		28	Nebraska	
		29	Nevada	
		30	New Hampshire	
		31	New Jersey	
		32	New Mexico	
		33	New York	
		34	North Carolina	
		35	North Dakota	
		36	Ohio	
		37	Oklahoma	
		38	Oregon	
		39	Pennsylvania	
		40	Rhode Island	
		41	South Carolina	
		42	South Dakota	
		43	Tennessee	
		44	Texas	
		45	Utah	
		46	Vermont	
		47	Virginia	
		48	Washington	
		49	West Virginia	

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		50 Wisconsin 51 Wyoming 52-57,59, 61,62 Foreign Residents 52 Puerto Rico 53 Virgin Islands 54 Guam 61 American Samoa 62 Northern Marianas 55 Canada 56 Cuba 57 Mexico 59 Remainder of the world
32-33		2 State of Residence (Cont'd)  Puerto Rico occurrence
		52 Puerto Rico 01-51,53-57,59, Foreign Residents: Refer to 61,62 U.S. for specific code structure.
		Virgin Islands occurrence
		53 Virgin Islands 01-52,54-57,59, Foreign Residents: Refer to 61,62 U.S. for specific code structure.  Guam occurrence
		54 Guam 01-51 U.S. resident is also considered a resident of Guam. 52-53,55-57,59, Foreign Residents: Refer to
		61,62 U.S. for specific code structure.
		American Samoa occurrence
		61 American Samoa 01-51 U.S. resident is also considered a resident of American Samoa 52-57,59,62 Foreign Residents: Refer to U.S. for specific code structure.
		Northern Marianas occurrence

(20)

62

... Northern

Marianas

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline	<u> </u>
		01-51	U.S resident is also considered a resident of
		52-57,59,61	Northern Marianas Foreign Residents: Refer to U.S. for specific code structure.
34-36	3	<u>CNTYRES</u> County of Residence	
		A complete list of Geographic Code Outdoown	counties is shown in the line further back in this
		001-nnn	Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county with a population of 100,000 or more in 1990.  (Note: To uniquely identify a county, both the State and
		999	county codes must be used.) County of less than 100,000 population
		ZZZ	Foreign Residents
37-39	3	CITYRES City of Residence	
			cities is shown in the line further back in this
		001-nnn	Cities are numbered alphabetically within each state and identify each city

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		with a population of 100,000 or more in 1990. (Note: To uniquely identify a city, both the State and city codes must be used. State, county and city codes may also be used.)  999  Balance of county  ZZZ  Foreign resident
40	1	CITRSPOP Population Size of City of Residence
		Based on the results of the 1990 census
		0 Place of 1,000,000 or more 1 Place of 500,000 to 1,000,000 2 Place of 250,000 to 500,000 3 Place of 100,000 to 250,000 9 All other areas in the U.S. Z Foreign residents
41	1	<u>METRORES</u> Metropolitan - Nonmetropolitan County of Residence
		NOTE: VIRGIN ISLANDS, GUAM, NORTHERN MARIANAS AND AMERICAN SAMOA DO NOT HAVE ANY METROPOLITAN AREAS  1 Metropolitan county 2 Nonmetropolitan county Z Foreign residents
42-57	16	<u>FIPSRES</u> <u>Federal Information Processing Standards (FIPS)</u> <u>Geographic Codes (Residence)</u>
		Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.  Some Geographic Codes have changed to reflect the Results of the 1990 Census.
42-43	2	STRESFIP State of Residence (FIPS)
		00 Foreign residents 01 Alabama

Tape Location	Field <u>Size</u>	Item and Co	de Out	line
		02 04 05 06 08 09 10 11 12 13 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32		Alaska Arizona Arkansas California Colorado Connecticut Delaware District of Columbia Florida Georgia Hawaii Idaho Illinois Indiana Iowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada
42-43	2	33 34  STRESFIP State of Res	idence	New Hampshire New Jersey  (FIPS)(Cont'd)
		35 36 37 38 39 40 41 42 44 45 46 47 48 49 50 51 53 54 55		New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming

#### Puerto Rico occurrence

Tape Location	Field <u>Size</u>	Item and Code Outline	
		72	00-56,60,66,78,69 Foreign Residents: Refer to U.S. for specific code structure Puerto Rico
		Virgin Islands occurrer	<u>ace</u>
		00-56,60,66,72,69	Foreign Residents: Refer to U.S. for specific code
		78	structure Virgin Islands
		Guam occurrence	
		01-56	00,60,72,78,69 Foreign Residents: Refer to U.S. for specific code structure U.S. Resident is also considered a resident of Guam. Refer to U.S. for
		66	specific code structure Guam
		<u>American Samoa occurrer</u> 00,66,72,78,69	nce  Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of American Samoa.Refer to specific code structure American Samoa
42-43	2	<u>STRESFIP</u> State of Residence (FIE	PS)(Cont'd)
		Northern Marianas occur 00,60,66,72,78	Foreign Residents: Refer to U.S. for specific code structure. U.S. Resident is also considered a resident of Northern Marianas. Refer to
		69	specific code structure. Northern Marianas
44-46	3	CNTYRFIP County of Residence (FI	IPS)
		001-nnn	Counties and county equivalents

Tape Location	Field <u>Size</u>	Item and Code Outline	
		999	(independent and coextensive cities) are numbered alphabetically within each State. (Note: To uniquely identify a county, both the State and county codes must be used.)  County of less than 100,000 population Foreign residents
47-51	5	<u>PLACEFIP</u> Place (City) of Resider	nce
	ci	code outline further with the 1994 data year	ties is shown in the Geographic back in this document. Effective ar, the FIPS place code has been record. It identifies each or more in 1990.
		00001- nnnnn Code 99999 Balar	range nce of county; or city of less 100,000 population
52-53	2	<u>CMSA</u> CMSA of Residence (FIPS	<u>s)</u>
		groupings of certain Statistical Areas and	litan Statistical Areas are Primary Metropolitan d are defined by the U.S. and Budget (OMB) as of June 30,
		<u>All AREAS</u> 00 Not a 0	CMSA
		CT, C	
			nati-Hamilton, OH-KY-IN, CMSA

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		28 Cleveland-Akron, OH, CMSA 31 Dallas-Fort Worth, TX, CMSA 34 Denver-Boulder-Greeley, CO, CMSA 35 Detroit-Ann Arbor-Flint, MI, CMSA 42 Houston-Galveston-Brazoria, TX, CMSA 49 Los Angeles-Riverside-Orange County, CA, CMSA 56 Miami-Fort Lauderdale, FL, CMSA 63 Milwaukee-Racine, WI, CMSA 70 New York-Northern New Jersey-Long Island, NY-NJ-CT-PA, CMSA 77 Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD, CMSA
		79 Portland-Salem, OR-WA, CMSA  82 Sacramento-Yolo, CA, CMSA 84 San Francisco-Oakland-San Jose, CA,CMSA 91 Seattle-Tacoma-Bremerton, WA, CMSA 97 Washington-Baltimore, DC-MD-VA-WV, CMSA
		Puerto Rico occurrence 87 San Juan-Caguas-Arecibo, PR, CMSA
54-57	4	SMSARFIP PMSA/MSA of Residence (FIPS)  Primary Metropolitan Statistical Areas and Metropolitan Statistical Areas are those defined by the U.S. Office of Management and Budget as of 1990. For New England, the New England County Metropolitan Areas (NECMA's) are used. Further back in this document is a list of PMSA's, MSA's, NECMA's, and their component counties.  Onco Nonmetropolitan counties or foreign residents Outloned on the counties or foreign residents Outloned on the counties or foreign residents Area of less than 100,000 population
58	1	CNTRSPOP Population Size of County of Residence  Based on the results of the 1990 Census.  0 County of 1,000,000 or more 1 County of 500,000 to 1,000,000 2 County of 250,000 to 500,000 3 County of 100,000 to 250,000 9 County of less than 100,000 Z Foreign resident
59-67	9	R1A Reserved Positions

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
68	1	MAGERFLG Reported Age of Mother Used Flag
		This position is flagged whenever the mother's reported age is used. The reported age is used, if valid, when age could not be computed or when the computed age is outside the 10-54 code range.
		Blank Reported age is not used 1 Reported age is used
69	1	MAGEIMP Age of Mother Imputation Flag
		Blank Age is not imputed  1 Age is imputed
70-71	2	DMAGE Age of Mother
		This item is: a) computed using dates of birth of mother and of delivery; b) reported; or c) imputed. This is the age item used in NCHS publications.
		10-54 Age in single years
72-73	2	MAGE36 Age of Mother Recode 36
72 72	2	01 Under 15 years 02 15 years 03 16 years 04 17 years 05 18 years 06 19 years 07 20 years 08 21 years 09 22 years 10 23 years 11 24 years 12 25 years
72-73	2	<u>MAGE36</u> <u>Age of Mother Recode 36 (Cont'd)</u>
		13 26 years 14 27 years 15 28 years 16 29 years 17 30 years 18 31 years 19 32 years 20 33 years 21 34 years 22 35 years

Tape <u>Location</u>	Field <u>Size</u>	Item and Co	ode Outline
		23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	36 years 37 years 38 years 39 years 40 years 41 years 42 years 42 years 44 years 45 years 46 years 47 years 48 years 49 years 50 years 51 years 52 years 53 years 54 years
74-75	2	MAGE12 Age of Moth  01 03 04 05 06 07 08 09 11 12 13 14	Under 15 years 15 years 16 years 17 years 18 years 19 years 20 - 24 years 25 - 29 years 30 - 34 years 35 - 39 years 40 - 44 years 45 - 49 years 50 - 54 years

76	1	MAGE8 Age o	-	ner Recode 8
		1		Under 15 years
		2		15 - 19 years
		3		20 - 24 years
		4 5	• • •	25 - 29 years 30 - 34 years
		6		35 - 39 years
		7		40 - 44 years
		8		45 – 49 years

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		9 50 - 54 years
77	1	ORMOTH Hispanic Origin of Mother  Hispanic origin is reported by all areas except Puerto Rico, Northern Marianas, and American Samoa
		0 Non-Hispanic 1 Mexican 2 Puerto Rican 3 Cuban 4 Central or South American 5 Other and unknown Hispanic 9 Origin unknown or not stated
78	1	ORRACEM Hispanic Origin and Race of Mother Recode
		Hispanic origin is reported by all areas except Puerto Rico, Northern Marianas, and American Samoa
		<pre>1 Mexican 2 Puerto Rican 3 Cuban 4 Central or South American 5 Other and unknown Hispanic 6 Non-Hispanic White 7 Non-Hispanic Black 8 Non-Hispanic other races 9 Origin unknown or not stated</pre>
79	1	MRACEIMP
		Race of Mother Imputation Flag  Blank Race is not imputed  1 Unknown race is imputed  2 All other races, formerly code 09, is imputed
80-81	2	MRACE Race of Mother
		United States occurrence  Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. Codes 18-68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. For consistency with Census race code 09

Tape	Field
<u>Location</u>	<u>Size</u>

#### Item and Code Outline

(all other races) used prior to 1992 has been imputed.

	01
	White
02	Black
03	American Indian (includes Aleuts and Eskimos)
04	Chinese
05	Japanese
06	Hawaiian (includes part-Hawaiian)
07	Filipino
18	Asian Indian
28	Korean
38	Samoan
48	Vietnamese
58	Guamanian
68	Other Asian or Pacific Islander in
	areas reporting codes 18-58
78	Combined other Asian or Pacific
	Islander, includes codes 18-68 for
	areas that do not report them
	separately

#### Puerto Rico occurrence

01		White	
02		Black	
00		Other	races

## Virgin Islands occurrence

UΙ	 white
02	 Black
03	 American Indian (includes Aleuts and
	Eskimos)
04	 Chinese
05	 Japanese
06	 Hawaiian (includes part-Hawaiian)
07	 Filipino
80	 Other Asian or Pacific Islander

80-81 2

MRACE Race of Mother (Cont'd)

Guam occurrence

Tape <u>Location</u>	Field <u>Size</u>	Item and C	ode Out	<u>tline</u>
		01		White
		02		Black
		03		American Indian (includes Aleuts and
		03	• • •	Eskimos)
		04		Chinese
		05		Japanese
		06		Hawaiian (includes part-Hawaiian)
		07		Filipino
		08		Other Asian or Pacific Islander
		58		Guamanian
		American Sam 01	<u>oa occ</u>	White
		02		Black
		03		American Indian (includes Aleuts and Eskimos)
		04		Chinese
		05		Japanese
		06		Hawaiian (includes part-Hawaiian)
		07		Filipino
		08		Other Asian or Pacific Islander
		Northern Ma	rianas	occurrence
		01		White
		02		Black
		03	•••	American Indian (includes Aleuts and Eskimos)
		04		Chinese
		05		Japanese
		06		
		07	• • •	Hawaiian (includes part-Hawaiian)
		0 7		Filipino Other Asian or Pacific Islander
82	1	MRACE3 Race of Mot  For All Are  1 2 3		code White Races other than White or Black Black

83-84 2 <u>DMEDUC</u> <u>Education of Mother</u>

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		Effective with 1992 data, all areas report education.
		OO No formal education O1-08 Years of elementary school O9 1 year of high school 10 2 years of high school 11 3 years of high school 12 4 years of high school 13 1 year of college 14 2 years of college 15 3 years of college 16 4 years of college 17 5 or more years of college 99 Not stated
85	1	MEDUC6 Education of Mother Recode
		<pre>1     0 - 8 years 2     9 - 11 years 3     12 years 4     13 - 15 years 5     16 years and over 6     Not stated</pre>
86	1	<u>DMARIMP</u> Marital Status of Mother Imputation Flag
		Blank Marital Status is not imputed Marital Status is imputed
87	1	DMAR Marital Status of Mother
		Marital status is not reported by all areas. See reporting flags.
		United States/Virgin Islands/Guam/American
		Samoa/Northern Marianas  1 Married
		<ul><li>2 Unmarried</li><li>9 Unknown or not stated</li></ul>
		Puerto Rico
		1 Married 2 Unmarried parents living together
		3 Unmarried parents living together together together
		9 Unknown or not stated

Tape <u>Location</u>	Field <u>Size</u>	Item and Co	ode Out	line
88-89	2	MPLBIR Place of Bir	th of	<u>Mother</u>
		01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 40 41 42 43 44 45 46 47 48 49 49 40 40 40 40 40 40 40 40 40 40 40 40 40		Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware District of Columbia Florida Georgia Hawaii Idaho Illinois Indiana Iowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Carolina South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming Puerto Rico
		53	• • •	Virgin Islands

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
88-89	2	54 Guam 61 American Samoa  MPLBIR Place of Birth of Mother (Cont'd)
		62 Northern Marianas
		55 Canada
		<u>56                                </u>
		57 Mexico 59 Remainder of the World
		99 Not classifiable
90	1	MPLBIRR
		Place of Birth of Mother Recode
		1 Native born
		2 Foreign born
		3 Unknown or not stated
91-92	2	<u>DMAGERPT</u>
		Reported Age of Mother
		10-54 Age in single years 99 Unknown or not stated
		diknown di not stated
93	1	<u>ADEQUACY</u> Adequacy Of Care Recode (Kessner Index)
		This recode is based on a modified Kessner criterion. Month Prenatal Care Began, Number of Prenatal Visits, and Gestation are the items used to generate this recode.
		1 Adequate
		2 Intermediate
		3 Inadequate 4 Unknown
0.4.05	•	
94-95	2	<u>NLBNL</u> <u>Number of Live Births, Now Living</u>
		Does not include this birth or adoptions.
		00-30 Stated number of births 99 Unknown or not stated
96-97	2	NLBND Number of Live Births, Now Dead
		Does not include this birth or adoptions.
		00-30 Stated number of births 99 Unknown or not stated
98-99	2	NOTERM Number of Other Terminations

Includes spontaneous and induced at any time after

Tape Location	Field <u>Size</u>	Item and Code Outline
		conception.
		00-30 Stated number of other terminations 99 Unknown or not stated
100-101	2	<u>DLIVORD</u> Detail Live Birth Order
		Sum of live births now living and now dead plus one. If either item is unknown, this item is made unknown.
		00-31 Number of children born alive to mother 99 Unknown
		dimiowii
102	1	<u>LIVORD9</u> Live Birth Order Recode
		1 First Child 2 Second Child 3 Third Child 4 Fourth Child 5 Fifth Child 6 Sixth Child 7 Seventh Child 8 Eighth Child and over 9 Unknown or not stated
103-104	2	<u>DTOTORD</u> <u>Detail Total Birth Order</u>
		Sum of live birth order and other terminations. If either item is unknown, this item is made unknown.
		01-40 Total number of live births and other terminations 99 Unknown
105	1	TOTORD9 Total Birth Order Recode
		1 First Child 2 Second Child 3 Third Child 4 Fourth Child 5 Fifth Child 6 Sixth Child 7 Seventh Child 8 Eighth Child and over 9 Unknown or not stated

Item and Code Outline

<u> </u>	<u>5120</u>	200m dra Codo Cacilla
106-107	2	MONPRE
		Detail Month of Pregnancy Prenatal Care Began
		booking the state of the state
		OO No monatal same
		00 No prenatal care
		01 1st month
		02 2nd month
		03 3rd month
		04 4th month
		05 5th month
		06 6th month
		07 7th month
		08 8th month
		09 9th month
		99 Unknown or not stated
108	1	MPRE6
100	_	Month Prenatal Care Began Recode 6
		Month Frenatar Care began Recode 0
		1
		1 1st - 2nd month
		2 3rd month
		3 4th - 6th month
		4 7th - 9th month
		5 No prenatal care
		6 Unknown or not stated
		o ommown of not beated
109	1	MPRE5
109	1	
		Month Prenatal Care Began Recode 5
		1 1st Trimester (1st-3rd month)
		2 2nd Trimester (4th-6th month)
		3 3rd Trimester (7th-9th month)
		4 No Prenatal Care
		5 Unknown or not stated
		5 ommown of not beated
110-111	2	NPREVIS
110-111	2	
		Total Number of Prenatal Visits
		00 No prenatal visits
		01-48 Stated number of visits
		49 49 or more visits
		99 Unknown or not stated
		77 6111116111 62 1166 266666
112-113	2	NPREV12
112-113	2	
		Number of Prenatal Visits Recode
		0.1
		01 No visits
		02 1 - 2 visits
		03 3 - 4 visits
		04 5 - 6 visits
		05 7 - 8 visits

Tape Location

Field

<u>Size</u>

2001 Detail Natality Record

Tape <u>Location</u>	Field <u>Size</u>	Item and Co	ode Out	<u>tline</u>
		06 07 08 09 10 11		9 - 10 visits 11 - 12 visits 13 - 14 visits 15 - 16 visits 17 - 18 visits 19 visits or more Unknown or not stated number of

Tape Location	Field <u>Size</u>	Item and Code Outline
114-121	8	<u>LMPDATE</u> Date Last Normal Menses Began
114-115	2	LMPMON Month Last Normal Menses Began
		01 January 02 February 03 March 04 April 05 May 06 June 07 July 08 August 09 September 10 October 11 November 12 December 99 Unknown or not stated month of LMP
116-117	2	LMPDAY Day Last Normal Menses Began
118-121	4	01-31 As applicable to month of LMP 99 Unknown or not stated day of LMP  LMPYR Year Last Normal Menses Began
		2000 2000 2001 2001 9999 Unknown or not stated year of LMP
122-132	11	Reserved Positions
133-137	5	Imputed Birthweight (applicable to denominator for Linked Birth/Death file only)
133	1 <u>£</u> :	Created beginning with 1995 data  BWIMP (applicable to denominator for linked Birth/Death ile only)
		Imputed Birthweight Flag  Blank Birthweight is not imputed  1 Birthweight is imputed
134-137	4	Imputed Birthweight (applicable to denominator for Linked Birth/Death file only)
		0227-8165 Number of grams

Tape Location	Field <u>Size</u>	Item and Code Outline
138-152	15	R2 Reserved Positions
153	1	FAGERFLG Reported Age of Father Used Flag
		This position is flagged whenever the father's reported age in years is used. The reported age is used, if valid, when age derived from date of birth is not available or when it is less than 10.
		Blank Reported age is not used 1 Reported age is used
154-155	2	<u>DFAGE</u> <u>Age of Father</u>
		This item is either computed from date of birth of father and of child or is the reported age. This is the age item used in NCHS publications.
		10-98 Age in single years 99 Unknown or not stated
156-157	2	<u>FAGE11</u> <u>Age of Father Recode</u>
		01 Under 15 years 02 15 - 19 years 03 20 - 24 years 04 25 - 29 years 05 30 - 34 years 06 35 - 39 years 07 40 - 44 years 08 45 - 49 years 09 50 - 54 years 10 55 - 98 years 11 Not stated
158	1	ORFATH Hispanic Origin of Father
		Hispanic origin of father is reported by all areas except Puerto Rico, Northern Marianas and American Samoa
		0 Non - Hispanic 1 Mexican 2 Puerto Rican 3 Cuban 4 Central or South American 5 Other and unknown Hispanic 9 Origin unknown or not stated

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
159	1	ORRACEF Hispanic Origin and Race of Father Recode Hispanic origin of father is reported by all areas except Puerto Rico, Northern Marianas and American Samoa.
		1 Mexican 2 Puerto Rican 3 Cuban 4 Central or South American 5 Other and unknown Hispanic 6 Non - Hispanic White 7 Non - Hispanic Black 8 Non - Hispanic other or unknown race 9 Origin unknown or not stated
160-161	2	FRACE Race of Father United States occurrence  Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. Codes 18-68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. For consistency with Census race code 09 (all other races) used prior to 1992 has been Changed to 99.
		01 White 02 Black 03 American Indian (includes Aleuts and Eskimos) 04 Chinese 05 Japanese 06 Hawaiian (includes part-Hawaiian) 07 Filipino 18 Asian Indian 28 Korean 38 Samoan 48 Vietnamese 58 Guamanian 68 Other Asian or Pacific Islander in areas reporting codes 18-58 78 Combined other Asian or Pacific Islander, includes codes 18-68 for areas that do not report them separately
		99 Unknown or Not Stated

Tape	Field	
<u>Location</u>	<u>Size</u>	Item and Code Outline
160-161	2	FRACE
		Race of Father (Cont'd)
		Puerto Rico occurrence
		01 White
		02 Black
		00 Other races 99 Unknown or not stated
		99 Unknown or not stated
		Virgin Islands occurrence
		01 White
		02 Black 03 American Indian (includes Aleuts and
		Eskimos)
		04 Chinese
		05 Japanese
		06 Hawaiian (includes part-Hawaiian)
		07 Filipino 08 Other Asian or Pacific Islander
		08 Other Asian or Pacific Islander 99 Unknown or Not Stated
		77 THE COMMISSION OF THE POWER
		Guam occurrence
		01 White
		02 Black 03 American Indian (includes Aleuts and
		Eskimos)
		04 Chinese
		05 Japanese
		06 Hawaiian (includes part-Hawaiian)
		07 Filipino 08 Other Asian or Pacific Islander
		58 Guamanian
		99 Unknown or Not Stated
		American Samoa occurrence 01 White
		01 White 02 Black
		03 American Indian (includes Aleuts and
		Eskimos)
		04 Chinese
		05 Japanese
		06 Hawaiian (includes part-Hawaiian) 07 Filipino
		08 Other Asian or Pacific Islander
		99 Unknown or Not Stated
		Northern Marianas occurrence
		01 White 02 Black
		υΔ DIQU

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		03 American Indian (includes Aleuts and Eskimos 04 Chinese 05 Japanese
		06 Hawaiian (includes part-Hawaiian) 07 Filipino 08 Other Asian or Pacific Islander
162	1	FRACE4 Race of Father Recode
		1 White 2 Races other than White, Black, or unknown 3 Black 4 Unknown or not stated
163-165	3	R2A Reserved positions
166-167	2	<u>DFAGERPT</u> <u>Reported Age of Father</u>
		10-98 Age in single years 99 Unknown or not stated
168	1	FRACEIMP Race of Father Imputation Flag  (Unknown race of father is not imputed. However, the all other races code is changed to unknown.)
		Blank Race is not changed  3 All other races, formerly code 09, is changed to code 99
169	1	Reserved Position
170	1	CDOBMIMP Month of Birth of Child Imputation Flag
		Blank Month is not imputed  1 Month is imputed
171	1	RB Reserved Position
172-173	2	BIRMON Month of Birth
		01 January 02 February 03 March 04 April

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		05 May 06 June 07 July 08 August 09 September 10 October 11 November 12 December
174-175	2	RC Reserved Positions
176-179	4	BIRYR Year of Birth 2001 2001
180	1	WEEKDAY Day of Week Child Born
		<pre>Sunday Monday Tuesday Wednesday Thursday Friday Saturday</pre>
181	1	GESTESTM Clinical Estimate of Gestation Used Flag
		This position is flagged whenever the clinical estimate of gestation is used. It is used when gestation could not be computed or when the computed gestation is outside the 17-47 code range.
		Blank Clinical Estimate is not used  1 Clinical Estimate is used
182	1	GESTIMP Gestation Imputation Flag
		Blank Gestation is not imputed 1 Gestation is imputed
183-184	2	<u>DGESTAT</u> Gestation - Detail in Weeks
		This item is: a) computed using dates of birth of

This item is: a) computed using dates of birth of child and last normal menses; b) imputed from LMP date; c) the clinical estimate; or d) unknown when there is insufficient data to impute or no valid clinical estimate. This is the gestation item used in NCHS publications.

Tape Location	Field <u>Size</u>	Item and Code Outline
		17-47 17th through 47th week of gestation 99 Unknown
185-186	2	GESTAT10 Gestation Recode 10
		01 Under 20 weeks 02 20 - 27 weeks 03 28 - 31 weeks 04 32 - 35 weeks 05 36 weeks 06 37 - 39 weeks 07 40 weeks 08 41 weeks 09 42 weeks and over 10 Not stated
187	1	GESTAT3 Gestation Recode 3  1 Under 37 weeks 2 37 weeks and over
188	1	3 Not stated  CSEXIMP Sex Imputation Flag
189	1	Blank Sex is not imputed  1 Sex is imputed  CSEX Sex
		1 Male 2 Female
190-192	3	<u>RD</u> Reserved Positions
193-196	4	DBIRWT Birthweight - Detail in Grams  0227-8165 Number of grams 9999 Not stated birthweight
197-198	2	BIRWT12 Birthweight Recode 12

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline				
		01 499 grams or less 02 500 - 999 grams 03 1000 - 1499 grams 04 1500 - 1999 grams 05 2000 - 2499 grams 06 2500 - 2999 grams 07 3000 - 3499 grams 08 3500 - 3999 grams 09 4000 - 4499 grams 10 4500 - 4999 grams 11 5000 - 8165 grams 12 Not stated				
199	1	BIRWT4 Birthweight Recode 4				
		1 1499 grams or less 2 1500 - 2499 grams 3 2500 - grams or more 4 Unknown or not stated				
200	1	<u>PLURIMP</u> Plurality Imputation Flag				
		Blank Plurality is not imputed 1 Plurality is imputed				
201	1	DPLURAL Plurality  1 Single 2 Twin 3 Triplet 4 Quadruplet				
202-204	3	5 Quintuplet or higher  Reserved positions				
205-206	2	FMAPS Five Minute Apgar Score				
		Apgar Score is not reported by all areas. See reporting flags.				
		00-10 A score of 0-10 99 Unknown or not stated				
207	1	<u>FMAPSR</u> Five Minute Apgar Score Recode				
		Apgar Score is not reported by all areas. See reporting flags.				
		1 A score of 0-3				

Tape Location	Field <u>Size</u>	Item and Code Outline
		2 A score of 4-6 3 A score of 7-8 4 A score of 9-10 5 Not stated
208-209	2	<pre>CLINGEST Clinical Estimate of Gestation</pre>
		Clinical estimate is not reported by all areas. See reporting flags.
		17-47 Estimated gestation in weeks 99 Unknown or not stated
210-216		7 <u>R4</u> <u>Reserved Positions</u>
217-306	90	MEDINFO Medical and Health Data
		Some States do not report an entire item while other States do not report all of the categories within an item.
		If an item is not reported, it is indicated by code zero in the appropriate reporting flag.
		If a category within an item is not reported it is indicated by code 8 in the position for that category.
217-222	6	DELMETH Method of Delivery
		Each method is assigned a separate position, and the code structure for each method (position) is:
		1 The method was used 2 The method was not used 8 Method not on certificate 9 Method unknown or not stated
217	1	VAGINAL Vaginal
218	1	<u>VBAC</u> Vaginal birth after previous C-section
219	1	PRIMAC Primary C -section
220	1	REPEAC Repeat C -section

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
221	1	FORCEP Forceps
222	1	VACUUM Vacuum
223	1	<u>R5</u> <u>Reserved Position</u>
224	1	DELMETH5 Method of Delivery Recode
		<ol> <li>Vaginal (excludes vaginal after previous C-section)</li> <li>Vaginal birth after previous C-section</li> <li>Primary C -section</li> <li>Repeat C -section</li> <li>Not stated</li> </ol>
225-241	17	<pre>MEDRISK Medical Risk Factors  Each risk factor is assigned a separate position, and the code structure for each risk factor (position) is:</pre>
		1 Factor reported 2 Factor not reported 8 Factor not on certificate 9 Factor not classifiable
225	1	ANEMIA Anemia (Hct.<30/Hgb.<10)
226	1	<u>CARDIAC</u> <u>Cardiac disease</u>
227	1	<u>LUNG</u> Acute or chronic lung disease
228	1	<u>DIABETES</u> <u>Diabetes</u>
229	1	<u>HERPES</u> <u>Genital herpes</u>
230	1	HYDRA Hydramnios/Oligohydramnios

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
231	1	HEMO Hemoglobinopathy
232	1	CHYPER Hypertension, chronic
233	1	PHYPER Hypertension, pregnancy-associated
234	1	ECLAMP Eclampsia
235	1	INCERVIX Incompetent cervix
236	1	PRE4000 Previous infant 4000+ grams
237	1	<pre>PRETERM Previous preterm or small-for-gestational-age infant</pre>
238	1	RENAL Renal disease
239	1	<u>RH</u>
240	1	Rh sensitization UTERINE Uterine bleeding
241	1	OTHERMR Other Medical Risk Factors
242-252	11	OTHERRSK Other Risk Factors for this Pregnancy
242-245	4	TOBACRSK Tobacco Risks
242	1	TOBACCO Tobacco Use During Pregnancy
		1 Yes 2 No 9 Unknown or not stated
243-244	2	<u>CIGAR</u> Average Number of Cigarettes Per Day
		00-97 As stated 98 98 or more cigarettes per day 99 Unknown or not stated
245	1	CIGAR6 Average Number of Cigarettes Per Day Recode

Tape Location	Field <u>Size</u>	Item and Code Outline				
		<pre>0    Nonsmoker 1    1 - 5 cigarettes per day 2    6 - 10 cigarettes per day 3    11 - 20 cigarettes per day 4    21 - 40 cigarettes per day 5    41 or more cigarettes per day 6    Unknown or not stated</pre>				
246-249	4	ALCOHRSK				
246	1	Alcohol  ALCOHOL  Alcohol Use During Pregnancy				
		1 Yes 2 No 9 Unknown or not stated				
247-248	2	<u>DRINK</u> Average Number of Drinks Per Week				
		00-97 As stated 98 98 or more drinks per week 99 Unknown or not stated				
249	1	<u>DRINK5</u> <u>Average Number of Drinks Per Week Recode</u>				
		<pre>0 Non drinker 1 1 drink per week 2 2 drinks per week 3 3 - 4 drinks per week 4 5 or more drinks per week 5 Unknown or not stated</pre>				
250-252	3	WTGANRSK Weight Gain During Pregnancy				
250-251	2	<u>WTGAIN</u> <u>Weight Gain</u>				
		00-97 Stated number of pounds 98 98 pounds or more 99 Unknown or not stated				
252	1	WTGAIN9				

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline						
	Weight Gain Recode							
		1 Less than 16 pounds 2 16 - 20 pounds 3 21 - 25 pounds 4 26 - 30 pounds 5 31 - 35 pounds 6 36 - 40 pounds 7 41 - 45 pounds 8 46 or more pounds 9 Unknown or not stated						
253-259	7	OBSTETRC Obstetric Procedures						
		Each procedure is assigned a separate position, and the code structure for each procedure (position) is:  1 Procedure reported 2 Procedure not reported 8 Procedure not on certificate 9 Procedure not classifiable						
253	1	AMNIO Amniocentesis						
254	1	MONITOR Electronic fetal monitoring						
255	1	INDUCT Induction of labor						
256	1	STIMULA Stimulation of labor						
257	1	TOCOL Tocolysis						
258	1	<u>ULTRAS</u> <u>Ultrasound</u>						
259	1	OTHEROB Other Obstetric Procedures						

Each complication is assigned a separate position,

<u>LABOR</u>
<u>Complications of Labor and/or Delivery</u>

260-275 16

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
		<pre>and the code structure for each complication (position) is:</pre>
		Complication reported Complication not reported Complication not on certificate Complication not classifiable
260	1	<pre>FEBRILE Febrile (&gt;100 degrees F. or 38 degrees C.)</pre>
261	1	MECONIUM Meconium, moderate/heavy
262	1	<pre>RUPTURE Premature rupture of membrane (&gt;12 hours)</pre>
263	1	ABRUPTIO Abruptio placenta
264	1	PREPLACE Placenta previa
265	1	EXCEBLD Other excessive bleeding
266	1	SEIZURE Seizures during labor
267	1	<pre>PRECIP Precipitous labor (&lt;3 hours)</pre>
268	1	PROLONG Prolonged labor (>20 hours)
269	1	<u>DYSFUNC</u> <u>Dysfunctional labor</u>
270	1	BREECH Breech/Malpresentation
271	1	CEPHALO
272	1	<pre>Cephalopelvic disproportion CORD Cord prolapse</pre>
273	1	ANESTHE Anesthetic complications
274	1	<u>DISTRESS</u> <u>Fetal distress</u>
275	1	OTHERLB Other Complication of Labor and/or Delivery

Tape <u>Location</u>	Field <u>Size</u>	Item and Code Outline
276-284	9	NEWBORN Abnormal Conditions of the Newborn
		Each condition is assigned a separate position, and the code structure for each condition (position) is:
		1 Condition reported 2 Condition not reported 8 Condition not on certificate 9 Condition not classifiable
276	1	NANEMIA Anemia (Hct.<39/Hgb.<13)
277	1	INJURY Birth injury
278	1	ALCOSYN Fetal alcohol syndrome
279	1	<u>HYALINE</u> <u>Hyaline membrane disease</u>
280	1	MECONSYN Meconium aspiration syndrome
281	1	VENL30 Assisted ventilation, less than 30 minutes
282	1	VEN30M Assisted ventilation, 30 minutes or more
283	1	<u>NSEIZ</u> <u>Seizures</u>
284	1	OTHERAB Other Abnormal Conditions of the Newborn
285-306	22	CONGENIT Congenital Anomalies
		Each anomaly is assigned a separate position, and the code structure for each anomaly (position) is:
		1 Anomaly reported 2 Anomaly not reported 8 Anomaly not on certificate 9 Anomaly not classifiable
285	1	ANEN Anencephalus
286	1	<u>SPINA</u> Spina bifida/Meningocele

Tape Location	Field <u>Size</u>	Item and Code Outline
287	1	HYDRO Hydrocephalus
288	1	MICROCE Microcephalus
289	1	NERVOUS Other central nervous system anomalies
290	1	<u>HEART</u> <u>Heart</u> malformations
291	1	<pre>CIRCUL Other circulatory/respiratory anomalies</pre>
292	1	RECTAL Rectal atresia/stenosis
293	1	<u>TRACHEO</u> <u>Tracheo - esophageal fistula/Esophageal atresia</u>
294	1	OMPHALO Omphalocele/Gastroschisis
295	1	GASTRO Other gastrointestinal anomalies
296	1	<u>GENITAL</u> <u>Malformed genitalia</u>
297	1	RENALAGE Renal agenesis
298	1	<u>UROGEN</u> Other urogenital anomalies
299	1	<pre>CLEFTLP Cleft lip/palate</pre>
300	1	ADACTYLY Polydactyly/Syndactyly/Adactyly
301	1	CLUBFOOT Club foot
302	1	<u>HERNIA</u> Diaphragmatic hernia
303	1	MUSCULO Other musculoskeletal/integumental anomalies
304	1	DOWNS Down's syndrome
305	1	CHROMO Other chromosomal anomalies

Tape Location	Field <u>Size</u>	Item and Code Outline
306	1	OTHERCON Other Congenital Anomalies
307-326	20	FLRES Reporting Flags for Place of Residence
		These positions contain flags to indicate whether or not the specified item is included on the birth certificate of the State of residence or of the MSA of residence. The code structure for each flag (position) is:
		0 The item is not reported 1 The item is reported or partially reported.
307	1	ORIGM Origin of mother
308	1	ORIGF Origin of father
309	1	EDUCM Education of mother
310	1	EDUCF Education of father
311	1	GESTE Clinical estimate of gestation
312	1	R6A Reserved position
313	1	<u>FMAPSRF</u> <u>5 - minute Apgar score</u>
314	1	<pre>DELMETRF Method of delivery</pre>
315	1	<u>MEDRSK</u>
		Medical risk factors
316	1	TOBUSE Tobacco use
317	1	ALCUSE Alcohol use
318	1	<u>WTGN</u> Weight gain
319	1	OBSTRC

Tape Location	Field <u>Size</u>	Item and Code Outline
		Obstetric procedures
320	1	<pre>CLABOR Complications of labor and/or delivery</pre>
321	1	ABNML Abnormal conditions of newborn
322	1	<pre>CONGAN Congenital anomalies</pre>
323	1	Reserved Position
324	1	EDUCSMSA Education of Mother (Based on MSA)
325	1	APIFLAG Race codes 18-68 reported (beginning with 1992 data)
326-346	21	R7 Reserved positions
347-349	3	SMSARES PSMA/MSA of Residence (NCHS)
		Primary Metropolitan Statistical Areas and Metropolitan Statistical Areas are those defined by the U.S. Office of Management and Budget (OMB) as of June 30, 1990. For New England, the New England County Metropolitan Areas (NECMA's) are used.
		Further back in this document is a list of PMSA's, MSA's, NECMA's, and their component counties.
		000 Nonmetropolitan counties 001-320 Code range 999 Area of less than 100,000 population ZZZ Foreign residents
350	1	POPSMAS PMSA/MSA Population Size
		Based on 1990 Census county population counts
		1 Area of 250,000 or more 2 Area of 100,000 to 250,000 9 Area of less than 100,000 or nonmetropolitan area Z Foreign resident

#### **Vital Statistics Geographic Code Outline for the United States**

The following pages show in detail the geographic codes used by the Division of Vital Statistics in the processing of vital event data occurring in the United States. When an event occurs to a nonresident of the United States, residence data are coded only to the "State" level; several western hemisphere countries or the remainder of the world are uniquely identified. Along with the Division of Vital Statistics codes the Federal Information Processing Standards (FIPS) codes are shown for several items. Both sets of codes appear on the vital event public-use files. The Metropolitan Statistical Area codes are effective with the 1996 data year and are based on the 1990 Census.

To aid the user in interpreting the geographic codes, a brief explanation of the codes and of the column headings/abbreviations shown on the following pages are:

State (St): Each State and the District of Columbia are numbered alphabetically. In addition, several unique codes are used to identify nonresidents of the U.S.

County (Cnty): Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State.

P/MSA: Primary metropolitan statistical areas and metropolitan statistical areas are those established by the U.S. Office of Management and Budget (OMB) using 1990 Census population counts. For New England, the New England County Metropolitan Areas (NECMA) are used.

M/NM: Metropolitan counties (code 1) are component counties of P/MSA's. Nonmetropolitan counties (code 2) are not part of any P/MSA.

City or place: Cities/places are numbered alphabetically within each State and identify each city with a population of 10,000 or more in 1990.

P/S: Population size code for city of residence based on the 1990 Census. Refer to the code outline given earlier in this document for specific codes and meanings.

Name: Each State, county, and city name is listed along with its respective code. In addition, places used to identify nonresidents of the U.S. are also listed along with their codes.

FIPS: For an explanation of FIPS codes, reference should be made to various National Institute of Standards & Technology (NITS) publications.

So! How do I find Yavapai county, Arizona; or Tupelo city, Mississippi?

Since counties and cities/places are numbered within State, the State and county or the State and city/places codes must be used to select these areas. It is most helpful if the county is known when looking for a particular city since areas are shown by State, county, and city.

Yavapai county, Arizona - State and county codes NCHS: 03 014; FIPS: 04 025.

Tupelo, Mississippi - State and city/place codes NCHS: 25 032; FIPS: 28 74840; or State, county, city/place codes NCHS: 25 041 032; FIPS: 28 081 74840.

List of Primary Metropolitan Statistical Areas and their Component Counties For the United States and Puerto Rico Primary and Metropolitan Statistical Areas Established in 1990 Page 2
Effective with 1994 and Adapted for Use by DVS
United States

			United States Puerto Rico			
Vital St P/MSA	atistic State	s Codes County	P/MSA Name and County Components	FIPS P/MSA	Code Stat	s e Cnty
001	44	221	Abilene, TX, MSA Texas Taylor	0040	48	441
002	36	067 077	Akron, OH, PMSA Ohio Portage Summit	0800	39	133 153
003	11	047 088	Albany, GA, MSA Georgia Dougherty Lee	0120	13	095 177
004	33	001 027 039 042 043	Albany-Schenectady-Troy, NY, MSA New York Albany Montgomery Rensselaer Saratoga Schenectady Schoharie	0160	36	001 057 083 091 093
005	32	001 024 033	Albuquerque, NM, MSA New Mexico Bernalillo Sandoval Valencia	0200	35	001 043 061
006	19	040	Alexandria, LA, MSA Louisiana Rapides	0220	22	079
007	39	013 039 048	Allentown-Bethlehem-Easton, PA, MSA Pennsylvania Carbon Lehigh Northampton	0240	42	025 077 095
800	39	007	Altoona, PA, MSA Pennsylvania Blair	0280	42	013
009	44	188 191	Amarillo, TX, MSA Texas Potter Randall	0320	48	375 381
010	02	003	Anchorage, AK, MSA Alaska Anchorage	0380	02	020
011	23	046 047 081	Ann Arbor, MI, PMSA Michigan Lenawee Livingston Washtenaw	0440	26	091 093 161
012	01	008	Anniston, AL, MSA Alabama Calhoun	0450	01	015
013	50	008 045 071	Appleton-Oshkosh-Neenah, WI, MSA Wisconsin Calumet Outagamie Winnebago	0460	55	015 087 139
014	34	011 058	Asheville, NC, MSA North Carolina Buncombe Madison	0480	37	021 115

# Primary and Metropolitan Statistical Areas Established in 1990 Page 3 Effective with 1994 and Adapted for Use by DVS United States Puerto Rico

				Puerto Rico			
Vital St P/MSA	atistic State		P/MSA Name and County	Components	FIPS P/MSA	Codes	e Cnty
015	11	029 097 108	Athens, GA, MSA Georgia Clarke Madison Oconee		0500	13	059 195 219
016	11	007 008 022 028 031 033 044 048 056 067 075 110 112 122 126 147	Atlanta, GA, MSA Georgia Barrow Bartow Carroll Cherokee Clayton Cobb Coweta De Kalb Douglas Fayette Forsyth Fulton Gwinnett Henry Newton Paulding Pickens Rockdale Spalding Walton		0520	13	013 015 045 057 067 067 089 097 1117 121 135 1217 2227 2247 2257
017	31	001 005	Atlantic-Cape May, NJ, New Jersey Atlantic Cape May	PMSA	0560	34	001 009
018	11	036 094 121	Augusta-Aiken, GA-SC, Georgia Columbia McDuffie Richmond South Carolina	MSA	0600	13 45	073 189 245
0.1.0	11	002 019	Aiken Edgefield		0.5.4.0	13	003 037
019	44	011 028 105 227 246	Austin-San Marcos, TX, Texas Bastrop Caldwell Hays Travis Williamson	, MSA	0640	48	021 055 209 453 491
020	05	015	Bakersfield, CA, MSA California Kern		0680	06	029
021	21	002 003 004 007 013 014 018	Baltimore, MD, PMSA Maryland Anne Arundel Baltimore Baltimore city Carroll Harford Howard Queen Anne's		0720	24	003 005 510 013 025 027 035
022	20	010	Bangor, ME, NECMA Maine Penobscot		0733	23	019
023	22	001	Barnstable-Yarmouth, Massachusetts Barnstable	MA, NECMA	0743	25	001

### Primary and Metropolitan Statistical Areas Established in 1990 Page 4 Effective with 1994 and Adapted for Use by DVS United States

		Puerto Rico			
Vital Statistic P/MSA State	cs Codes County	P/MSA Name and County Components	FIPS P/MSA	Codes	Cnty
024 19	003 017 032 061	Baton Rouge, LA, MSA Louisiana Ascension East Baton Rouge Livingston West Baton Rouge	0760	22	005 033 063 121
025 44	100 123 181	Beaumont-Port Arthur, TX, MSA Texas Hardin Jefferson Orange	0840	48	199 245 361
026 48	037	Bellingham, WA, MSA Washington Whatcom	0860	53	073
027 23	011	Benton Harbor, MI, MSA Michigan Berrien	0870	26	021
028 31	002 016	Bergen-Passaic, NJ, PMSA New Jersey Bergen Passaic	0875	34	003 031
029 27	056	Billings, MT, MSA Montana Yellowstone	0880	30	111
030 25	023 024 030	Biloxi-Gulfport-Pascagoula, MS, MSA Mississippi Hancock Harrison Jackson	0920	28	045 047 059
031	003 050	Binghamton, NY, MSA New York Broome Tioga	0960	36	007 107
032 01	005 037 058 059	Birmingham, AL, MSA Alabama Blount Jefferson St. Clair Shelby	1000	01	009 073 115 117
033 35	008 030	Bismarck, ND, MSA North Dakota Burleigh Morton	1010	38	015 059
034 15	053	Bloomington, IN, MSA Indiana Monroe	1020	18	105
035 14	057	Bloomington-Normal, IL, MSA Illinois McLean	1040	17	113
036	001 014	Boise City, ID, MSA Idaho Ada Canyon	1080	16	001 027

Primary and Metropolitan Statistical Areas Established in 1990 Page 5
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United States

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77 <sup>2</sup> 1 O-		G1	Puerto Rico	HTDG	Q1	
Vital St P/MSA		s Codes County	P/MSA Name and County Components	P/MSA	Codes	e Cnty
037	22	003 005 009 011 012 013 014	Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH Massachusetts Bristol Essex Middlesex Norfolk Plymouth Suffolk Worcester	1123	25	005 009 017 021 023 025 027
	30	006 008 009	New Hampshire Hillsborough Rockingham Strafford		33	011 015 017
038	06	007	Boulder-Longmont, CO, PMSA Colorado Boulder	1125	08	013
039	44	020	Brazoria, TX, PMSA Texas Brazoria	1145	48	039
040	48	018	Bremerton, WA, PMSA Washington Kitsap	1150	53	035
041	44	031	Brownsville-Harlingen-San Benito, TX, MSA Texas Cameron	1240	48	061
042	44	021	Bryan-College Station, TX, MSA Texas Brazos	1260	48	041
043	33	014 030	Buffalo-Niagara Falls, NY, MSA New York Erie Niagara	1280	36	029 063
044	46	004 006 007	Burlington, VT, NECMA Vermont Chittenden Franklin Grand Isle	1303	50	007 011 013
045	36	010 076	Canton-Massillon, OH, MSA Ohio Carroll Stark	1320	39	019 151
046	51	013	Casper, WY, MSA Wyoming Natrona	1350	56	025
047	16	057	Cedar Rapids, IA, MSA Iowa Linn	1360	19	113
048	14	010	Champaign-Urbana, IL, MSA Illinois Champaign	1400	17	019
049	41	008 010 018	Charleston-North Charleston, SC, MSA South Carolina Berkeley Charleston Dorchester	1440	45	015 019 035
050	49	020 040	Charleston, WV, MSA West Virginia Kanawha Putnam	1480	54	039 079

## Primary and Metropolitan Statistical Areas Established in 1990 Page 6 Effective with 1994 and Adapted for Use by DVS United States Puerto Rico

		_	Puerto Rico		_	
Vital Sta P/MSA			P/MSA Name and County Components	FIPS P/MSA	Code Stat	s e Cnty
051	34	013 036 055 060 080 090	Charlotte-Gastonia-Rock Hill, NC-SC, MSA North Carolina Cabarrus Gaston Lincoln Mecklenburg Rowan Union	1520	37	025 071 109 119 159 179
	41	046	South Carolina York		45	091
052	47	002 025 045 055	Charlottesville, VA, MSA Virginia Albemarle Charlottesville city Fluvanna Greene	1540	51	003 540 065 079
053	11	023 041 146	Chattanooga, TN-GA, MSA Georgia Catoosa Dade Walker	1560	13	047 083 295
	43	033 058	Tennessee Hamilton Marion		47	065 115
054	51	011	Cheyenne, WY, MSA Wyoming Laramie	1580	56	021
055	14	016 019 022 032 045 047 049 056 099	Chicago, IL, PMSA Illinois Cook De Kalb Du Page Grundy Kane Kendall Lake McHenry Will	1600	17	031 037 043 063 089 097 111 197
056	05	004	Chico-Paradise, CA, MSA California Butte	1620	06	007
057	15	015 058	Cincinnati, OH-KY-IN, PMSA Indiana Dearborn Ohio	1640	18	029 115
	18	008 019 039 041 059 096	Kentucky Boone Campbell Gallatin Grant Kenton Pendleton		21	015 037 077 081 117 191
	36	008 013 031 083	Ohio Brown Clermont Hamilton Warren		39	015 025 061 165
058	18 43	024 063	Clarksville-Hopkinsville, TN-KY, MSA Kentucky Christian Tennessee Montgomery	1660	21 47	047 125

### Primary and Metropolitan Statistical Areas Established in 1990 Page 7 Effective with 1994 and Adapted for Use by DVS United States

			United States Puerto Rico			
Vital St P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Code Stat	s e Cnty
059	36	004 018 028 043 047 052	Cleveland-Lorain-Elyria, OH, PMSA Ohio Ashtabula Cuyahoga Geauga Lake Lorain Medina	1680	39	007 035 055 085 093 103
060	06	021	Colorado Springs, CO, MSA Colorado El Paso	1720	08	041
061	26	010	Columbia, MO, MSA Missouri Boone	1740	29	019
062	41	032 040	Columbia, SC, MSA South Carolina Lexington Richland	1760	45	063 079
063	01 11	057 026 072	Columbus, GA-AL, MSA Alabama Russell Georgia Chattahoochee Harris	1800	01 13	113 053 145
064	36	021 023 025 045 049 065	Muscogee Columbus, OH, MSA Ohio Delaware Fairfield Franklin Licking Madison Pickaway	1840	39	041 045 049 089 097 129
065	44	178 205	Corpus Christi, TX, MSA Texas Nueces San Patricio	1880	48	355 409
066	21 49	001 029	Cumberland, MD-WV, MSA Maryland Allegany West Virginia Mineral	1900	24 54	001 057
067	44	043 057 061 070 107 116 129 199	Dallas, TX, PMSA Texas Collin Dallas Denton Ellis Henderson Hunt Kaufman Rockwall	1920	48	085 113 121 139 213 231 257 397
068	47	035 097	Danville, VA, MSA Virginia Danville city Pittsylvania	1950	51	590 143
069	14	037	Davenport-Moline-Rock Island, IA-IL, MSA Illinois Henry	1960	17	073
	16	081 082	Rock Island Iowa Scott		19	161 163

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Vital St P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Codes State	Cnty
070	36	012 029 055 057	Dayton-Springfield, OH, MSA Ohio Clark Greene Miami Montgomery	2000		023 057 109 113
071	10	018 064	Daytona Beach, FL, MSA Florida Flagler Volusia	2020	12	035 127
072	01	040 052	Decatur, AL, MSA Alabama Lawrence Morgan	2030	01	079 103
073	14	058	Decatur, IL, MSA Illinois Macon	2040	17	115
074	06	001 003 016 018 030	Denver, CO, PMSA Colorado Adams Arapahoe Denver Douglas Jefferson	2080		001 005 031 035 059
075	16	025 077 091	Des Moines, IA, MSA Iowa Dallas Polk Warren	2120		049 153 181
076	23	044 050 058 063 074 082	Detroit, MI, PMSA Michigan Lapeer Macomb Monroe Oakland St. Clair Wayne	2160		087 099 115 125 147 163
077	01	023 035	Dothan, AL, MSA Alabama Dale Houston	2180	01	045 069
078	08	001	Dover, DE, MSA Delaware Kent	2190	10	001
079	16	031	Dubuque, IA, MSA Iowa Dubuque	2200	19	061
080	24 50	069 016	Duluth-Superior, MN-WI, MSA Minnesota St. Louis Wisconsin Douglas	2240	55	137 031
081	33	013	Dutchess County, NY, PMSA New York Dutchess	2281	36	027
082	50	009 018	Eau Claire, WI, MSA Wisconsin Chippewa Eau Claire	2290	55	017 035

### Primary and Metropolitan Statistical Areas Established in 1990 Page 9 Effective with 1994 and Adapted for Use by DVS United States

			United States Puerto Rico			
Vital St P/MSA	atistic State	s Codes County	P/MSA Name and County Components	FIPS P/MSA	Code: State	e Cnty
083	44	071	El Paso, TX, MSA Texas El Paso	2320	48	141
084	15	020	Elkhart-Goshen, IN, MSA Indiana Elkhart	2330	18	039
085	33	007	Elmira, NY, MSA New York Chemung	2335	36	015
086	37	024	Enid, OK, MSA Oklahoma Garfield	2340	40	047
087	39	025	Erie, PA, MSA Pennsylvania Erie	2360	42	049
088	38	020	Eugene-Springfield, OR, MSA Oregon Lane	2400	41	039
089	15	065 082	Evansville-Henderson, IN-KY, MSA Indiana Posey Vanderburgh	2440	18	129 163
	18	087 051	Warrick Kentucky Henderson		21	173 101
090	24 35	014	Fargo-Moorhead, ND-MN, MSA Minnesota Clay North Dakota	2520	27 38	027
091	34	009	Cass Fayetteville, NC, MSA North Carolina Cumberland	2560	37	017
092	04	004 072	Fayetteville-Springdale-Rogers, AR, MSA Arkansas Benton Washington	2580	05	007
093	23	025	Flint, MI, PMSA Michigan Genesee	2640	26	049
094	01	017 039	Florence, AL, MSA Alabama Colbert Lauderdale	2650	01	033 077
095	41	021	Florence, SC, MSA South Carolina Florence	2655	45	041
096	06	035	Fort Collins-Loveland, CO, MSA Colorado Larimer	2670	08	069
097	10	006	Fort Lauderdale, FL, PMSA Florida Broward	2680	12	011
098	10	036	Fort Myers-Cape Coral, FL, MSA Florida Lee	2700	12	071

## Primary and Metropolitan Statistical Areas Established in 1990 Page 10 Effective with 1994 and Adapted for Use by DVS United States Puerto Rico

			Puerto Rico			
Vital St P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Code Stat	s e Cnty
099	10	043 056	Fort Pierce-Port St. Lucie, FL, MSA Florida Martin St. Lucie	2710	12	085 111
100	04	017 066	Fort Smith, AR-OK, MSA Arkansas Crawford Sebastian	2720	05	033 131
	37	068	Oklahoma Sequoyah		40	135
101	10	046	Fort Walton Beach, FL, MSA Florida Okaloosa	2750	12	091
102	15	001 002 017 035 090	Fort Wayne, IN, MSA Indiana Adams Allen De Kalb Huntington Wells Whitley	2760	18	001 003 033 069 179 183
103	44	111 126 184 220	Fort Worth-Arlington, TX, PMSA Texas Hood Johnson Parker Tarrant	2800	48	221 251 367 439
104	05	010 020	Fresno, CA, MSA California Fresno Madera	2840	06	019 039
105	01	028	Gadsden, AL, MSA Alabama Etowah	2880	01	055
106	10	001	Gainesville, FL, MSA Florida Alachua	2900	12	001
107	44	084	Galveston-Texas City, TX, PMSA Texas Galveston	2920	48	167
108	15	045 064	Gary, IN, PMSA Indiana Lake Porter	2960	18	089 127
109	33	053 054	Glens Falls, NY, MSA New York Warren Washington	2975	36	113 115
110	34	096	Goldsboro, NC, MSA North Carolina Wayne	2980	37	191
111	24	060	Grand Forks, ND-MN, MSA Minnesota Polk	2985	27	119
	35	018	North Dakota Grand Forks		38	035

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		a 1	Puerto Rico		a 1	
Vital St P/MSA		s Codes County	P/MSA Name and County Components	P/MSA	Codes	e Cnty
112	23	003 041 061 070	Grand Rapids-Muskegon-Holland, MI, MSA Michigan Allegan Kent Muskegon Ottawa	3000	26	005 081 121 139
113	27	007	Great Falls, MT, MSA Montana Cascade	3040	30	013
114	06	062	Greeley, CO, PMSA Colorado Weld	3060	08	123
115	50	005	Green Bay, WI, MSA Wisconsin Brown	3080	55	009
116	34	001 029 030 034 041 076 085 099	GreensboroWinston-SalemHigh Point, NC, MSA North Carolina Alamance Davidson Davie Forsyth Guilford Randolph Stokes Yadkin	3120	37	001 057 059 067 081 151 169
117	34	074	Greenville, NC, MSA North Carolina Pitt	3150	37	147
118	41	004 011 023 039 042	Greenville-Spartanburg-Anderson, SC, MSA South Carolina Anderson Cherokee Greenville Pickens Spartanburg	3160	45	007 021 045 077 083
119	21	022	Hagerstown, MD, PMSA Maryland Washington	3180	24	043
120	36	009	Hamilton-Middletown, OH, PMSA Ohio Butler	3200	39	017
121	39	021 022 038 050	Harrisburg-Lebanon-Carlisle, PA, MSA Pennsylvania Cumberland Dauphin Lebanon Perry	3240	42	041 043 075 099
122	07	002 004 007	Hartford, CT, NECMA Connecticut Hartford Middlesex Tolland	3283	09	003 007 013
123	25	018 037	Hattiesburg, MS, MSA Mississippi Forrest Lamar	3285	28	035 073
124	34	002 012 014 018	Hickory-Morganton, NC, MSA North Carolina Alexander Burke Caldwell Catawba	3290	37	003 023 027 035

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		~ 1	Puerto Rico	a	a 1	
Vital St P/MSA	State		P/MSA Name and County Components	P/MSA	Codes	: Cnty
125	12	002	Honolulu, HI, MSA Hawaii Honolulu	3320	15	003
126	19	029 055	Houma, LA, MSA Louisiana Lafourche Terrebonne	3350	22	057 109
127	44	036 079 101 146 170 237	Houston, TX, PMSA Texas Chambers Fort Bend Harris Liberty Montgomery Waller	3360	48	071 157 201 291 339 473
128	18 36 49	010 022 045 044	Huntington-Ashland, WV-KY-OH, MSA Kentucky Boyd Carter Greenup Ohio Lawrence West Virginia Cabell	3400	21 39 54	019 043 089 087
129	01	050 042 045	Wayne Huntsville, AL, MSA Alabama Limestone Madison	3440	01	099 083 089
130	15	006 029 030 032 041 048 049 055	Indianapolis, IN, MSA Indiana Boone Hamilton Hancock Hendricks Johnson Madison Marion Morgan Shelby	3480	18	011 057 059 063 081 095 097 109
131	16	052	Iowa City, IA, MSA Iowa Johnson	3500	19	103
132	23	038	Jackson, MI, MSA Michigan Jackson	3520	26	075
133	25	025 045 061	Jackson, MS, MSA Mississippi Hinds Madison Rankin	3560	28	049 089 121
134	43	057	Jackson, TN, MSA Tennessee Madison	3580	47	113
135	10	010 016 045 055	Jacksonville, FL, MSA Florida Clay Duval Nassau St. Johns	3600	12	019 031 089 109
136	34	067	Jacksonville, NC, MSA North Carolina Onslow	3605	37	133

## Primary and Metropolitan Statistical Areas Established in 1990 Page 13 Effective with 1994 and Adapted for Use by DVS United States Puerto Rico

			Puerto Rico			
Vital St P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Code Stat	s e Cnty
137	33	006	Jamestown, NY, MSA New York Chautauqua	3610	36	013
138	50	054	Janesville-Beloit, WI, MSA Wisconsin Rock	3620	55	105
139	31	009	Jersey City, NJ, PMSA New Jersey Hudson	3640	34	017
140	43	010 037	Johnson City-Kingsport-Bristol, TN-VA, MSA Tennessee Carter Hawkins	3660	47	019 073
	47	082 086 090 015 115 129	Sullivan Unicoi Washington Virginia Bristol city Scott Washington		51	163 171 179 520 169 191
141	39	011 056	Johnstown, PA, MSA Pennsylvania Cambria Somerset	3680	42	021 111
142	26	049 073	Joplin, MO, MSA Missouri Jasper Newton	3710	29	097 145
143	23	013 039 080	Kalamazoo-Battle Creek, MI, MSA Michigan Calhoun Kalamazoo Van Buren	3720	26	025 077 159
144	14	046	Kankakee, IL, PMSA Illinois Kankakee	3740	17	091
145	17	046 052 061 105	Kansas City, MO-KS, MSA Kansas Johnson Leavenworth Miami Wyandotte	3760	20	091 103 121 209
	26	019 024 025 048 054 083 089	Missouri Cass Clay Clinton Jackson Lafayette Platte Ray		29	037 047 049 095 107 165 177
146	50	030	Kenosha, WI, PMSA Wisconsin Kenosha	3800	55	059
147	44	014 050	Killeen-Temple, TX, MSA Texas Bell Coryell	3810	48	027 099

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77 <sup>2</sup> 1 O-		G1		Puerto Rico	DIDG	Q1	
Vital St P/MSA		s Codes County	P/MSA Name and County	Components	P/MSA	Codes	Cnty
148	43	001 005 047 053 078 087	Knoxville, TN, MSA Tennessee Anderson Blount Knox Loudon Sevier Union		3840	47	001 009 093 105 155 173
149	15	034 080	Kokomo, IN, MSA Indiana Howard Tipton		3850	18	067 159
150	24 50	028 032	La Crosse, WI-MN, MSA Minnesota Houston Wisconsin La Crosse		3870	27 55	055 063
151	19	001 028 049 050	Lafayette, LA, MSA Louisiana Acadia Lafayette St. Landry St. Martin		3880	22	001 055 097 099
152	15	012 079	Lafayette, IN, MSA Indiana Clinton Tippecanoe		3920	18	023 157
153	19	010	Lake Charles, LA, MSA Louisiana Calcasieu		3960	22	019
154	10	053	Lakeland-Winter Haven, Florida Polk	FL, MSA	3980	12	105
155	39	036	Lancaster, PA, MSA Pennsylvania Lancaster		4000	42	071
156	23	019 023 033	Lansing-East Lansing, Michigan Clinton Eaton Ingham	MI, MSA	4040	26	037 045 065
157	44	240	Laredo, TX, MSA Texas Webb		4080	48	479
158	32	008	Las Cruces, NM, MSA New Mexico Dona Ana		4100	35	013
159	03 29	009 003 013	Las Vegas, NV-AZ, MSA Arizona Mohave Nevada Clark Nye		4120	04 32	015 003 023
160	17	023	Lawrence, KS, MSA Kansas Douglas		4150	20	045
161	37	016	Lawton, OK, MSA Oklahoma Comanche		4200	40	031

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Vital Statistics Codes		~ 1	Puerto Rico			
Vital Sta P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Codes	cnty
162	20	001	Lewiston-Auburn, ME, NECMA Maine Androscoggin	4243	23	001
163	18	009 025 034 057 076 105	Lexington, KY, MSA Kentucky Bourbon Clark Fayette Jessamine Madison Scott Woodford	4280	21	017 049 067 113 151 209 239
164	36	002 006	Lima, OH, MSA Ohio Allen Auglaize	4320	39	003 011
165	28	055	Lincoln, NE, MSA Nebraska Lancaster	4360	31	109
166	04	023 043 060 063	Little Rock-North Little Rock, AR, MSA Arkansas Faulkner Lonoke Pulaski Saline	4400	05	045 085 119 125
167	44	092 102 230	Longview-Marshall, TX, MSA Texas Gregg Harrison Upshur	4420	48	183 203 459
168	05	019	Los Angeles-Long Beach, CA, PMSA California Los Angeles	4480	06	037
169	15	010 022 031 072	Louisville, KY-IN, MSA Indiana Clark Floyd Harrison Scott	4520	18	019 043 061 143
	18	015 056 093	Kentucky Bullitt Jefferson Oldham		21	029 111 185
170	44	152	Lubbock, TX, MSA Texas Lubbock	4600	48	303
171	47	006 011 012 020 076	Lynchburg, VA, MSA Virginia Amherst Bedford Bedford city Campbell Lynchburg city	4640	51	009 019 515 031 680
172	11	011 076 084 111 143	Macon, GA, MSA Georgia Bibb Houston Jones Peach Twiggs	4680	13	021 153 169 225 289
173	50	013	Madison, WI, MSA Wisconsin Dane	4720	55	025

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TT' 1 7 G		a 1	Puerto Rico	====	a 1	
Vital Sta P/MSA		s Codes County	P/MSA Name and County Components	P/MSA	Codes	Cnty
174	36	017 070	Mansfield, OH, MSA Ohio Crawford Richland	4800		033 139
175	44	108	McAllen-Edinburg-Mission, TX, MSA Texas Hidalgo	4880	48	215
176	38	015	Medford-Ashland, OR, MSA Oregon Jackson	4890	41	029
177	10	005	Melbourne-Titusville-Palm Bay, FL, MSA Florida Brevard	4900	12	009
178	04	018	Memphis, TN-AR-MS, MSA Arkansas Crittenden	4920	05	035
	25	017	Mississippi De Soto		28	033
	43	024 079 084	Tennessee Fayette Shelby Tipton			047 157 167
179	05	024	Merced, CA, MSA California Merced	4940	06	047
180	10	013	Miami, FL, PMSA Florida Dade	5000	12	025
181	31	010 012 018	Middlesex-Somerset-Hunterdon, NJ, PMSA New Jersey Hunterdon Middlesex Somerset	5015		019 023 035
182	50	041 046 067 068	Milwaukee-Waukesha, WI, PMSA Wisconsin Milwaukee Ozaukee Washington Waukesha	5080		079 089 131 133
183	24	002 010 013 019 027 030 062 070 071 086	Minneapolis-St. Paul, MN-WI, MSA Minnesota Anoka Carver Chisago Dakota Hennepin Isanti Ramsey Scott Sherburne Washington Wright	5120		003 019 025 037 053 059 123 139 141 163 171
	50	048 056	Wisconsin Pierce St. Croix		55	093 109
184	01	002 049	Mobile, AL, MSA Alabama Baldwin Mobile	5160		003 097
185	05	050	Modesto, CA, MSA California Stanislaus	5170	06	099

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Vital St	atictic	g Codes	Puerto Rico	FIDG	Code	a
P/MSA		County	P/MSA Name and County Components	P/MSA		e Cnty
186	31	013 015	Monmouth-Ocean, NJ, PMSA New Jersey Monmouth Ocean	5190	34	025 029
187	19	037	Monroe, LA, MSA Louisiana Ouachita	5200	22	073
188	01	001 026 051	Montgomery, AL, MSA Alabama Autauga Elmore Montgomery	5240	01	001 051 101
189	15	018	Muncie, IN, MSA Indiana Delaware	5280	18	035
190	41	026	Myrtle Beach, SC, MSA South Carolina Horry	5330	45	051
191	10	011	Naples, FL, MSA Florida Collier	5345	12	021
192	43	011 019 022 074 075 083 094 095	Nashville, TN, MSA Tennessee Cheatham Davidson Dickson Robertson Rutherford Sumner Williamson Wilson	5360	47	021 037 043 147 149 165 187
193	33	028 048	Nassau-Suffolk, NY, PMSA New York Nassau Suffolk	5380	36	059 103
194	07	001 005	New Haven-Bridgeport-Stamford-Danbury-Waterbury, CT, NECMA Connecticut Fairfield New Haven	5483	09	001 009
195	07	006	New London-Norwich, CT, NECMA Connecticut New London	5523	09	011
196	19	026 036 038 044 045 047 048 052	New Orleans, LA, MSA Louisiana Jefferson Orleans Plaquemines St. Bernard St. Charles St. James St. John the Baptist St. Tammany	5560	22	051 071 075 087 089 093 095 103
197	33	029 038 040 056	New York, NY, PMSA New York New York city Putnam Rockland Westchester	5600	36	005 079 087 119

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		~ 1	Puerto Rico			~ 1	
Vital St P/MSA		s Codes County	P/MSA Name and County Components		FIPS P/MSA	Codes	e Cnty
198	31	007 014 019 020 021	Newark, NJ, PMSA New Jersey Essex Morris Sussex Union Warren		5640	34	013 027 037 039 041
199	33 39	034 052	Newburgh, NY-PA, PMSA New York Orange Pennsylvania Pike		5660	36 42	071 103
200	34 47	027 026 052 058 065 066 081 087 088 098 099 123 127 132	Norfolk-Virginia Beach-Newport News, North Carolina Currituck Virginia Chesapeake city Gloucester Hampton city Isle of Wight James City Mathews Newport News city Norfolk city Poquoson city Portsmouth city Suffolk city Virginia Beach city Williamsburg city York	VA-NC, MSA	5720	37 51	053 550 073 6593 0995 115 700 715 740 800 810 830 199
201	05	001 007	Oakland, CA, PMSA California Alameda Contra Costa		5775	06	001 013
202	10	042	Ocala, FL, MSA Florida Marion		5790	12	083
203	44	068 165	Odessa-Midland, TX, MSA Texas Ector Midland		5800	48	135 329
204	37	009 014 042 044 055 063	Oklahoma City, OK, MSA Oklahoma Canadian Cleveland Logan McClain Oklahoma Pottawatomie		5880	40	017 027 083 087 109 125
205	48	034	Olympia, WA, PMSA Washington Thurston		5910	53	067
206	16 28	078 013 028 077 089	Omaha, NE-IA, MSA Iowa Pottawattamie Nebraska Cass Douglas Sarpy Washington		5920	19 31	155 025 055 153 177
207	05	030	Orange County, CA, PMSA California Orange		5945	06	059

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		_		Puerto Rico		_	
Vital St P/MSA		s Codes County	P/MSA Name and County	Components	FIPS P/MSA	Codes	Cnty
208	10	035 048 049 059	Orlando, FL, MSA Florida Lake Orange Osceola Seminole		5960	12	069 095 097 117
209	18	030	Owensboro, KY, MSA Kentucky Daviess		5990	21	059
210	10	003	Panama City, FL, MSA Florida Bay		6015	12	005
211	36	084	Parkersburg-Marietta, Ohio Washington	WV-OH, MSA	6020	39	167
	49	054	West Virginia Wood			54	107
212	10	017 057	Pensacola, FL, MSA Florida Escambia Santa Rosa		6080	12	033 113
213	14	072 090 102	Peoria-Pekin, IL, MSA Illinois Peoria Tazewell Woodford		6120	17	143 179 203
214	31	003 004 008 017	Philadelphia, PA-NJ, New Jersey Burlington Camden Gloucester Salem	PMSA	6160	34	005 007 015 033
	39	009 015 023 046 051	Pennsylvania Bucks Chester Delaware Montgomery Philadelphia			42	017 029 045 091
215	03	008 012	Phoenix-Mesa, AZ, MSA Arizona Maricopa Pinal		6200	04	013 021
216	04	035	Pine Bluff, AR, MSA Arkansas Jefferson		6240	05	069
217	39	002 004 010 026 063 065	Pittsburgh, PA, MSA Pennsylvania Allegheny Beaver Butler Fayette Washington Westmoreland		6280	42	003 007 019 051 125 129
218	22	002	Pittsfield, MA, NECMA Massachusetts Berkshire		6323	25	003
219	20	003	Portland, ME, NECMA Maine Cumberland		6403	23	005

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Vital Statistics Codes		~ 1	Puerto Rico		~ -	
Vital St P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Codes	e Cnty
220	38	003 005 026 034 036	Portland-Vancouver, OR-WA, PMSA Oregon Clackamas Columbia Multnomah Washington Yamhill Washington Clark	6440	41 53	005 009 051 067 071
221	40	001 002 004 005	Providence-Warwick-Pawtucket, RI, NECMA Rhode Island Bristol Kent Providence Washington	6483	44	001 003 007 009
222	45	025	Provo-Orem, UT, MSA Utah Utah	6520	49	049
223	06	051	Pueblo, CO, MSA Colorado Pueblo	6560	08	101
224	10	008	Punta Gorda, FL, MSA Florida Charlotte	6580	12	015
225	50	052	Racine, WI, PMSA Wisconsin Racine	6600	55	101
226	34	019 032 035 051 068 092	Raleigh-Durham-Chapel Hill, NC, MSA North Carolina Chatham Durham Franklin Johnston Orange Wake	6640	37	037 063 069 101 135 183
227	42	051	Rapid City, SD, MSA South Dakota Pennington	6660	46	103
228	39	006	Reading, PA, MSA Pennsylvania Berks	6680	42	011
229	05	045	Redding, CA, MSA California Shasta	6690	06	089
230	29	016	Reno, NV, MSA Nevada Washoe	6720	32	031
231	48	003 011	Richland-Kennewick-Pasco, WA, MSA Washington Benton Franklin	6740	53	005 021

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			Puerto Rico			
Vital Sta P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Codes	cnty
232	47	023 027 030 037 053 059 061 064 086 096 100 102	Richmond-Petersburg, VA, MSA Virginia Charles City Chesterfield Colonial Heights city Dinwiddie Goochland Hanover Henrico Hopewell city New Kent Petersburg city Powhatan Prince George Richmond city	6760	51	036 041 570 053 075 085 087 670 127 730 145 149 760
233	05	033 036	Riverside-San Bernardino, CA, PMSA California Riverside San Bernardino	6780	06	065 071
234	47	014 109 110 114	Roanoke, VA, MSA Virginia Botetourt Roanoke Roanoke city Salem city	6800	51	023 161 770 775
235	24	055	Rochester, MN, MSA Minnesota Olmsted	6820	27	109
236	33	018 024 026 033 035 055	Rochester, NY, MSA New York Genesee Livingston Monroe Ontario Orleans Wayne	6840	36	037 051 055 069 073 117
237	14	004 071 101	Rockford, IL, MSA Illinois Boone Ogle Winnebago	6880	17	007 141 201
238	34	033 064	Rocky Mount, NC, MSA North Carolina Edgecombe Nash	6895	37	065 127
239	05	009 031 034	Sacramento, CA, PMSA California El Dorado Placer Sacramento	6920	06	017 061 067
240	23	009 056 073	Saginaw-Bay City-Midland, MI, MSA Michigan Bay Midland Saginaw	6960	26	017 111 145
241	24	005 073	St. Cloud, MN, MSA Minnesota Benton Stearns	6980	27	009 145
242	26	002 011	St. Joseph, MO, MSA Missouri Andrew Buchanan	7000	29	003 021

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				Puerto Rico			
Vital Sta P/MSA		s Codes County	P/MSA Name and County	Components	FIPS P/MSA	Codes State	Cnty
243	14	014 042 060 067 082	St. Louis, MO-IL, MSA Illinois Clinton Jersey Madison Monroe St. Clair		7040		027 083 119 133 163
	26	036 050 057 092 095 096 110	Missouri Franklin Jefferson Lincoln St. Charles St. Louis St. Louis Warren			29	071 099 113 183 189 510 219
244	38	024 027	Salem, OR, PMSA Oregon Marion Polk		7080	41	047 053
245	05	027	Salinas, CA, MSA California Monterey		7120	06	053
246	45	006 018 029	Salt Lake City-Ogden, Utah Davis Salt Lake Weber	UT, MSA	7160		011 035 057
247	44	226	San Angelo, TX, MSA Texas Tom Green		7200	48	451
248	44	015 046 094 247	San Antonio, TX, MSA Texas Bexar Comal Guadalupe Wilson		7240		029 091 187 493
249	05	037	San Diego, CA, MSA California San Diego		7320	06	073
250	05	021 038 041	San Francisco, CA, PMS California Marin San Francisco San Mateo	5A	7360		041 075 081
251	05	043	San Jose, CA, PMSA California Santa Clara		7400	06	085
252	05	040	San Luis Obispo-Atasca California San Luis Obispo	adero-Paso Robles, CA, MSA	7460	06	079
253	05	042	Santa Barbara-Santa Ma California Santa Barbara	aria-Lompoc, CA, MSA	7480	06	083
254	05	044	Santa Cruz-Watsonville California Santa Cruz	e, CA, PMSA	7485	06	087
255	32	016 027	Santa Fe, NM, MSA New Mexico Los Alamos Santa Fe		7490		028 049

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			Puerto Rico			
Vital St P/MSA		s Codes County	P/MSA Name and County Components	FIPS P/MSA	Codes	Cnty
256	05	049	Santa Rosa, CA, PMSA California Sonoma	7500	06	097
257	10	041 058	Sarasota-Bradenton, FL, MSA Florida Manatee Sarasota	7510	12	081 115
258	11	015 025 051	Savannah, GA, MSA Georgia Bryan Chatham Effingham	7520	13	029 051 103
259	39	019 035 040 066	ScrantonWilkes-BarreHazleton, PA, MSA Pennsylvania Columbia Lackawanna Luzerne Wyoming	7560	42	037 069 079 131
260	48	015 017 031	Seattle-Bellevue-Everett, WA, PMSA Washington Island King Snohomish	7600	53	029 033 061
261	39	043	Sharon, PA, MSA Pennsylvania Mercer	7610	42	085
262	50	060	Sheboygan, WI, MSA Wisconsin Sheboygan	7620	55	117
263	44	091	Sherman-Denison, TX, MSA Texas Grayson	7640	48	181
264	19	008 009 060	Shreveport-Bossier City, LA, MSA Louisiana Bossier Caddo Webster	7680	22	015 017 119
265	16 28	097 022	Sioux City, IA-NE, MSA Iowa Woodbury Nebraska Dakota	7720	19 31	193 043
266	42	041 049	Sioux Falls, SD, MSA South Dakota Lincoln Minnehaha	7760	46	083 099
267	15	071	South Bend, IN, MSA Indiana St. Joseph	7800	18	141
268	48	032	Spokane, WA, MSA Washington Spokane	7840	53	063
269	14	065 084	Springfield, IL, MSA Illinois Menard Sangamon	7880	17	129 167

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		~ 7	Puerto Rico		. ~ -	
Vital St P/MSA		County County	P/MSA Name and County Components	P/MSA	S Code: State	s e Cnty
270	26	022 039 113	Springfield, MO, MSA Missouri Christian Greene Webster	7920	29	043 077 225
271	22	007 008	Springfield, MA, NECMA Massachusetts Hampden Hampshire	8003	25	013 015
272	39	014	State College, PA, MSA Pennsylvania Centre	8050	42	027
273	36	041	Steubenville-Weirton, OH-WV, MSA Ohio Jefferson	8080	39	081
	49	005 015	West Virginia Brooke Hancock		54	009 029
274	05	039	Stockton-Lodi, CA, MSA California San Joaquin	8120	06	077
275	41	043	Sumter, SC, MSA South Carolina Sumter	8140	45	085
276	33	005 025 032 036	Syracuse, NY, MSA New York Cayuga Madison Onondaga Oswego	8160	36	011 053 067 075
277	48	027	Tacoma, WA, PMSA Washington Pierce	8200	53	053
278	10	020 037	Tallahassee, FL, MSA Florida Gadsden Leon	8240	12	039 073
279	10	027 029 051 052	Tampa-St. Petersburg-Clearwater, FL, MSA Florida Hernando Hillsborough Pasco Pinellas	8280	12	053 057 101 103
280	15	011 083 084	Terre Haute, IN, MSA Indiana Clay Vermillion Vigo	8320	18	021 165 167
281	04 44	046	Texarkana, TX-Texarkana, AR, MSA Arkansas Miller Texas	8360	05 48	091
282	36	019 026 048	Bowie Toledo, OH, MSA Ohio Fulton Lucas	8400		037 051 095
283	17	087	Wood Topeka, KS, MSA Kansas Shawnee	8440	20	173 177

# Primary and Metropolitan Statistical Areas Established in 1990 Page 25 Effective with 1994 and Adapted for Use by DVS United States Puerto Rico

		_	Pue	erto Rico		_	
Vital St P/MSA	atistic State	s Codes County	P/MSA Name and County Com	ponents	FIPS P/MSA	Codes	e Cnty
284	31	011	Trenton, NJ, PMSA New Jersey Mercer		8480	34	021
285	03	011	Tucson, AZ, MSA Arizona Pima		8520	04	019
286	37	019 057 066 072 073	Tulsa, OK, MSA Oklahoma Creek Osage Rogers Tulsa Wagoner		8560	40	037 113 131 143 145
287	01	063	Tuscaloosa, AL, MSA Alabama Tuscaloosa		8600	01	125
288	44	212	Tyler, TX, MSA Texas Smith		8640	48	423
289	33	021 031	Utica-Rome, NY, MSA New York Herkimer Oneida		8680	36	043 065
290	05	028 048	Vallejo-Fairfield-Napa, C California Napa Solano	'A, PMSA	8720	06	055 095
291	05	056	Ventura, CA, PMSA California Ventura		8735	06	111
292	44	235	Victoria, TX, MSA Texas Victoria		8750	48	469
293	31	006	Vineland-Millville-Bridge New Jersey Cumberland	ton, NJ, PMSA	8760	34	011
294	05	054	Visalia-Tulare-Portervill California Tulare	e, CA, MSA	8780	06	107
295	44	155	Waco, TX, MSA Texas McLennan		8800	48	309

### Primary and Metropolitan Statistical Areas Established in 1990 Page 26 Effective with 1994 and Adapted for Use by DVS

			United States			
Vital St	atiatia	a Codea	Puerto Rico	PTDC	Code	a
P/MSA		County	P/MSA Name and County Components	P/MSA		e Cnty
296	0.0		Washington, DC-MD-VA-WV, PMSA	8840		
	09	001	Dist. of Columbia District of Columbia		11	001
	21		Maryland		24	
		005 009	Calvert Charles			009 017
		011	Frederick			021
		016 017	Montgomery Prince George's			031 033
	47		Virginia		51	
		003 008	Alexandria city Arlington			510 013
		028	Clarke			043
		033 040	Culpeper Fairfax			047 059
		041	Fairfax city			600
		042 043	Falls Church city Fauquier			610 061
		049	Fredericksburg city			630
		068 073	King George Loudoun			099 107
		078 079	Manassas city Manassas Park city			683 685
		103	Prince William			153
		120 121	Spotsylvania Stafford			177 179
		128	Warren			187
	49	002	West Virginia Berkeley		54	003
		019	Jefferson			037
297	1.0		Waterloo-Cedar Falls, IA, MSA	8920	1.0	
	16	007	Iowa Black Hawk		19	013
298			Wausau, WI, MSA	8940		
	50	037	Wisconsin Marathon		55	073
299		037	West Palm Beach-Boca Raton, FL, MSA	8960		073
200	10		Florida	0,000	12	
		050	Palm Beach			099
300	36		Wheeling, WV-OH, MSA Ohio	9000	39	
		007	Belmont			013
	49	026	West Virginia Marshall		54	051
		035	Ohio			069
301	1 17		Wichita, KS, MSA	9040	0.0	
	17	008	Kansas Butler		20	015
		040	Harvey			079
302		087	Sedgwick	9080		173
302	44		Wichita Falls, TX, MSA Texas	9000	48	
		005 243	Archer Wichita			009 485
303		243	Williamsport, PA, MSA	9140		403
303	39		Pennsylvania	J110	42	
		041	Lycoming	0.1.5		081
304	08		Wilmington-Newark, DE-MD, PMSA Delaware	9160	10	
		002	New Castle			003
	21	008	Maryland Cecil		24	015

# Primary and Metropolitan Statistical Areas Established in 1990 Page 27 Effective with 1994 and Adapted for Use by DVS United States Puerto Rico

Vital Sta	atiatia	a Codea		Puerto Rico	FIDG	Codes	,
		County	P/MSA Name and County	Components	P/MSA		Cnty
305	34	010 065	Wilmington, NC, MSA North Carolina Brunswick New Hanover		9200	37	019 129
306	48	039	Yakima, WA, MSA Washington Yakima		9260	53	077
307	05	057	Yolo, CA, PMSA California Yolo		9270	06	113
308	39	067	York, PA, MSA Pennsylvania York		9280	42	133
309	36	015 050 078	Youngstown-Warren, OH, Ohio Columbiana Mahoning Trumbull	, MSA	9320	39	029 099 155
310	05	051 058	Yuba City, CA, MSA California Sutter Yuba		9340	06	101 115
311	03	015	Yuma, AZ, MSA Arizona Yuma		9360	04	027

#### TECHNICAL APPENDIX FROM

## VITAL STATISTICS OF THE UNITED STATES

### 2001

### **NATALITY**

### U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

## CENTERS FOR DISEASE CONTROL AND PREVENTION NATIONAL CENTER FOR HEALTH STATISTICS

Hyattsville, Maryland: Revised February 2003

## VITAL STATISTICS OF THE UNITED STATES, 2001 VOLUME 1, NATALITY TECHNICAL APPENDIX

#### **NOTE**

This report has been updated to include information on newly available populations based on the 2000 census, and newly revised population-based birth and fertility rates. Please see sections on "Random variation and significance testing for natality data" and "Population bases."

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#### Introduction

This report, published by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS), is an updated and abridged version of the 1999 Technical Appendix and focuses on information for the 2001 data file (1). This Appendix is also included in *Vital Statistics of the United States, 2001, Volume I, Natality* (in preparation). Reference will be made to the 1999 Technical Appendix for historical discussion of the variables, definitions, quality, and completeness of the birth data (2). This report supplements the Technical notes section of "Births: Final Data for 2001" (3) and is recommended for use with the public-use file for 2001 births, available on CD-ROM from NCHS, and the tabulated data of *Vital Statistics of the United States, 2001, Volume I, Natality* (in preparation).

#### **Definition of Live Birth**

Every product of conception that gives a sign of life after birth, regardless of the length of the pregnancy, is considered a live birth. This concept is included in the definition set forth by the World Health Organization in 1950 and revised in 1988 by a working group formed by the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists (4, 5, 6):

Live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered liveborn.

This definition distinguishes in precise terms a live birth from a fetal death (see section on fetal deaths in the Technical Appendix of volume II, *Vital Statistics of the United States*). In the interest of comparable natality statistics, both the Statistical Commission of the United Nations and CDC's NCHS have adopted this definition (7, 8).

#### **History of Birth-Registration Area**

Currently the birth-registration system of the United States covers the 50 States, the District of Columbia, the independent registration area of New York City and Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (referred to as Northern Marianas). However, in the statistical tabulations, "United States" refers only to the aggregate of the 50 States (including New York City) and the District of Columbia. Information on the history and development of the birth-registration area is available elsewhere (2).

#### **Sources of Data**

#### **Natality statistics**

Since 1985 natality statistics for all States and the District of Columbia have been based on information from the total file of records. The information is received on electronic files of individual records processed by the States and provided to NCHS through the Vital Statistics Cooperative Program. NCHS receives these files from the registration offices of all States, the District of Columbia, and New York City. Information for Puerto Rico and the Virgin Islands is also received through the Vital Statistics Cooperative Program. Information for Guam, American Samoa, and the Northern Marianas is obtained from microfilm copies of original birth certificates and is based on the total file of records for all years. (Data from American Samoa first became available in 1997 and from the Northern Marianas in 1998.)

U.S. natality data are limited to births occurring within the United States, including those occurring to U.S. residents and nonresidents. Births to nonresidents of the United States have been excluded from all tabulations by place of residence beginning in 1970 (for further discussion see "Classification by occurrence and residence"). Births occurring to U.S. citizens outside the United States are not included in any tabulation in this report. Data for Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Marianas are limited to births registered in these areas.

#### Standard certificate of live birth

The U.S. Standard Certificate of Live Birth, issued by the Public Health Service, has served for many years as the principal means of attaining uniformity in the content of the documents used to collect information on births in the United States. It has been modified in each State to the extent required by the particular State's needs or by special provisions of the State's vital statistics law. However, most State certificates conform closely in content to the standard certificate.

1989 revision—Effective January 1, 1989, a revised U.S. Standard Certificate of Live Birth (figure 4–A) replaced the 1978 revision. This revision provided a wide variety of new information on maternal and infant health characteristics, representing a significant departure from previous versions in both content and format. The most significant format change was the use of checkboxes to obtain detailed medical and health information about the mother and child. Details of the nature and content of the 1989 revision are available elsewhere (2).

#### **Classification of Data**

One of the principal values of vital statistics data is realized through the presentation of rates computed by relating the vital events of a class to the population of a similarly defined class. Vital statistics and population statistics, therefore, must be classified according to similarly defined systems and tabulated in comparable groups. Even when the variables common to both (such as geographic area, age, race, and sex) have been similarly classified and tabulated, significant discrepancies may result from the differences between methods used to obtain the data: population data are obtained by enumeration while vital statistics data are obtained via registration.

The general rules used to classify geographic and personal items for live births are set forth in "Vital Statistics Classification and Coding Instructions for Live Birth Records, 1999–2001," *NCHS Instruction Manual*, Part 3a (9). This material is incorporated in the basic file layout on the CD-ROM (1). The instruction materials are for States to use in coding the data items; they do not include any NCHS recodes. The file layout is a better source of information on the code structure since it provides the exact codes and recodes that are available.

The classification of certain important items is discussed in the following pages. Information on the completeness of reporting of birth certificate data is shown in table A, which presents a listing of items and the percent of records that were not stated for each State, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Marianas.

#### Classification by occurrence and residence

In tabulations by place of residence, births occurring within the United States to U.S. citizens and to resident aliens are allocated to the usual place of residence of the mother in the United States, as reported on the birth certificate. Beginning in 1970, births to nonresidents of the United States occurring in the United States are excluded from these tabulations. Births to U.S. residents occurring outside this country are excluded from place of residence tabulations.

The total count of births for the United States by place of residence and by place of occurrence will not be identical. Births to nonresidents of the United States are included in data by place of occurrence but excluded from data by place of residence, as previously indicated. See table B for the number of births by residence and occurrence for the 50 States and the District of Columbia for 2001.

Residence error—A nationwide test of birth-registration completeness in 1950 provided measures of residence error for natality statistics. According to the 1950 test (which has not been repeated), errors in residence reporting for the country as a whole tend to overstate the number of births to residents of urban areas and to understate the number of births to residents of other areas (10). Recent experience demonstrates that this is still a concern based on anecdotal evidence from the States. This tendency has assumed special importance because of a concomitant development—the increased utilization of hospitals in cities by residents of nearby places—with the result that a number of births are erroneously reported as having occurred to residents of urban areas. Another factor that contributes to this overstatement of urban births is the customary practice of using city addresses for persons living outside the city limits. Residence error should be taken into consideration in interpreting data for small areas and for cities. Both birth and infant mortality patterns can be affected.

*Incomplete residence*—Beginning in 1973, in cases where only the State of residence is reported with no city or county specified and the State named is different from the State of occurrence, the birth is allocated to the largest city of the State of residence. Before 1973, such births were allocated to the exact place of occurrence.

#### **Geographic classification**

The rules followed in the classification of geographic areas for live births are contained in the instruction manual mentioned previously. The geographic code structure itself for 2001 is given in another manual, "Vital Records Geographic Classification, 1995," *NCHS Instruction Manual*, Part 8, which is included with the documentation file on CD-ROM (1). The geographic code structure in 2001 is based on results of the 1990 Census of Population.

*United States*—In the statistical tabulations, "United States" refers only to the aggregate of the 50 States and the District of Columbia. Alaska has been included in the U.S. tabulations since 1959 and Hawaii since 1960.

Details of the classification of births for metropolitan statistical areas, metropolitan and nonmetropolitan counties, and population size groups for cities and urban places are presented elsewhere (2).

Places with a population of less than 100,000 are not separately identified on the publicuse file because of confidentiality limitations.

#### Race or national origin

Beginning with the 1989 data year, birth data are tabulated primarily by race of mother. The criteria for reporting the race of the parents did not change in 1989, and it continues to reflect the response of the informant (usually the mother). The factors influencing the decision to tabulate births by race of the mother have been discussed in detail elsewhere (2, 11). Information on tabulation procedures for data by race prior to 1989 is presented elsewhere (2).

Beginning with the 1992 issue of *Vital Statistics of the United States*, *Volume I, Natality*, trend data for years beginning with 1980 have been retabulated by race of mother. The change in the tabulation of births by race presents some problems when analyzing birth data by race, particularly trend data. The problem is likely to be acute for races other than white and black.

The categories for race or national origin are "White," "Black," "American Indian" (including Aleuts and Eskimos), "Chinese," "Japanese," "Hawaiian," "Filipino," and "Other Asian or Pacific Islander" (including Asian Indian). Before 1992, there was also an "other" category, which is now combined with the "not stated" category. Before 1978, the category "Other Asian or Pacific Islander" was not identified separately but included with "other" races. The separation of this category from "other" allows identification of the "Asian or Pacific Islander" category by combining the new category "Other Asian or Pacific Islander" with Chinese, Japanese, Hawaiian, and Filipino.

Since 1992, States with the largest Asian or Pacific Islander (API) populations have provided NCHS with data for additional API subgroups. The API subgroups include Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and other. In 2001, 11 States were included in this reporting area: California, Hawaii, Illinois, Minnesota, Missouri, New Jersey, New York, Texas, Virginia, Washington, and West Virginia. At least two-thirds of the U.S. population of each of these additional API groups lived in the 11-State reporting area (12). The data are available on the detailed natality tapes and CD-ROMs beginning with the 1992 data year. An analytic report based on the 1992 data year is also available upon request (13).

If the race or national origin of an Asian parent is ill-defined or not clearly identifiable with one of the categories used in the classification (for example, if "Oriental" is entered), an attempt is made to determine the specific race or national origin from the place of birth entry. If the birthplace is China, Japan, or the Philippines, the race of the parent is assigned to that category. When race cannot be determined from birthplace, it is assigned to the "Other Asian or Pacific Islander" category.

Hispanic origin and race are reported independently on the birth certificate. Data for Hispanic subgroups are shown, in most cases, for five groups: Mexican, Puerto Rican, Cuban, Central and South American, and other (and unknown) Hispanic. In tabulations of birth data by race only, data for persons of Hispanic origin are included in the data for each race group

according to the mother's reported race. The "White" category comprises births reported as white and births where race, as distinguished from Hispanic origin, is reported as Hispanic. In tabulations of birth data by race and Hispanic origin, data for persons of Hispanic origin are not further classified by race because the vast majority of births to Hispanic women are reported as white (98 percent in 2001). In these tabulations, data for non-Hispanic persons are classified according to the race of the mother because there are substantial differences in fertility and maternal and infant health between Hispanic and non-Hispanic white women. A recode variable is available that provides cross tabulations of race by Hispanic origin.

Race or national origin not stated—If the race of the mother is not defined or not identifiable with one of the categories used in the classification (0.4 percent of births in 2001) and the race of the father is known, the race of the father is assigned to the mother. Where information for both parents is missing, the race of the mother is allocated electronically according to the specific race of the mother on the preceding record with a known race of mother. Data for both parents were missing for only 0.3 percent of birth certificates for 2001.

Nearly all statistics by race or national origin for the United States as a whole in 1962 and 1963 are affected by a lack of information for New Jersey, which did not report the race of the parents in those years. Birth rates by race for those years are computed on a population base that excluded New Jersey. For the method of estimating the U.S. population by age, sex, and race excluding New Jersey in 1962 and 1963, see page 4–8 in the Technical Appendix of volume I, *Vital Statistics of the United States*, 1963. The percent of records for which Hispanic origin of the parents was not reported in 2001 is shown by State in table A.

#### Age of mother

Beginning in 1989, a "Date if Birth" item replaced the "Age (at time of this birth)" on the birth certificate. Not all States revised this item, and therefore the age of mother is derived from either the reported month and year of birth or coded as stated on the certificate. In 2001, the mother's age was reported directly by five States (Kentucky, Nevada, North Dakota, Virginia, and Wyoming) and American Samoa.

From 1964 to 1996, age of mother was considered not stated and therefore imputed for ages under 10 years or 50 years and over. Beginning in 1997, age of mother was considered not stated and imputed for ages under 10 years or 55 years and over. The numbers of births to women aged 50–54 years are too small for computing age-specific birth rates; these births have been included with births to women aged 45–49 years for computing birth rates.

Age-specific birth rates are based on populations of women by age, prepared by the U.S. Bureau of the Census. In census years the decennial census counts are used. In intercensal years, estimates of the population of women by age are published by the U.S. Bureau of the Census in *Current Population Reports*.

The U.S. and State-level birth and fertility rates for the 2001 final report of natality data are based on estimates as of July 1 projected from the 1990 census because detailed populations based on the 2000 census were not available when the report was prepared. When the necessary population estimates based on the 2000 census and intercensal estimates become available, population-based rates for the 1990s, 2000, and 2001 will be recalculated and presented in an upcoming report. Meanwhile, considerable caution should be used in interpreting the rates and trends for the Nation and States, particularly for race specific rates (see section on population bases).

Median age of mother—Median age is the value that divides an age distribution into two equal parts, one-half of the values being less and one-half being greater. Median ages of mothers for 1960 to the present have been computed from birth rates for 5-year age groups rather than from birth frequencies. This method eliminates the effects of changes in the age composition of the childbearing population over time. Changes in the median ages from year to year can thus be attributed solely to changes in the age-specific birth rates. Trend data on the median age is shown in table 1–5 of *Vital Statistics of the United States, 1999, Volume I, Natality* (at <a href="http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab99.htm">http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab99.htm</a>).

Not stated date of birth of mother—In 2001, age of mother was not reported on 0.01 percent of the records. Beginning in 1964 birth records with date of birth of mother and/or age of mother not stated have had age imputed according to the age of mother from the previous birth record of the same race and total-birth order (total of fetal deaths and live births). (See "Computer Edits for Natality Data, Effective 1993," NCHS Instruction Manual, Part 12, page 9) (14). Editing procedures for 1963 and earlier years are described elsewhere (2).

#### Age of father

Age of father is derived from the reported date of birth or coded as stated on the birth certificate. If the age is under 10 years, it is considered not stated and grouped with those cases for which age is not stated on the certificate. Information on age of father is often missing from birth certificates of children born to unmarried mothers, greatly inflating the number of "not stated" responses in all tabulations by age of father. In computing birth rates by age of father, births tabulated as age of father not stated are distributed in the same proportions as births with known age within each 5-year-age classification of the mother. This procedure is followed because, while father's age is missing in 13 percent of the birth certificates in 2001, 28 percent of these were on records where the mother is a teenager. This distribution procedure is done separately by race. The resulting distributions are summed to form a composite frequency distribution that is the basis for computing birth rates by age of father. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded. Births with age of father not stated are distributed only for rates, not for frequency tabulations (3).

#### **Live-birth order and parity**

Live-birth order and parity classifications refer to the total number of live births the mother has had including the 2001 birth. Fetal deaths are excluded.

Live-birth order indicates what number the present birth represents; for example, a baby born to a mother who has had two previous live births (even if one or both are not now living) has a live-birth order of three. Parity indicates how many live births a mother has had. Before delivery a mother having her first baby has a parity of zero, and a mother having her third baby has a parity of two. After delivery, the mother of a baby who is a first live birth has a parity of one, and the mother of a baby who is a third live birth has a parity of three.

Live-birth order and parity are determined from two items on the birth certificate, "Live births now living" and "Live births now dead." Editing procedures for live birth order are summarized elsewhere (2, 14).

*Not stated birth order*—All births tabulated in the "birth order not stated" category are excluded from the computation of percents. In computing birth rates by live-birth order, births

tabulated as birth order not stated are distributed in the same proportion as births of known live-birth order.

#### **Educational attainment**

National data on educational attainment are currently available only for the mother (2). Beginning in 1995, NCHS ceased to collect information on the educational attainment of the father.

The educational attainment of the mother is defined as "the number of years of school completed." Only those years completed in "regular" schools are counted, that is, a formal educational system of public schools or the equivalent in accredited private or parochial schools. Business or trade schools, such as beauty and barber schools, are not considered "regular" schools for the purposes of this item. No attempt has been made to convert years of school completed in foreign school systems, ungraded school systems, and so forth, to equivalent grades in the American school system. Such entries are included in the "not stated" category.

Women who have completed only a partial year in high school or college are tabulated as having completed the highest preceding grade. For those certificates on which a specific degree is stated, years of school completed is coded to the level at which the degree is most commonly attained; for example, women reporting B.A., A.B., or B.S. degrees are considered to have completed 16 years of school.

Education not stated—The "not stated" category includes all records in reporting areas for which there is no information on years of school completed as well as all records for which the information provided is not compatible with coding specifications. Births tabulated as "education not stated" are excluded from the computations of percents.

In 2001 educational attainment for Alabama was miscoded; some Hispanic mothers with no education were miscoded as having 12 years of education. Caution should be used when interpreting Alabama data on education for Hispanic women.

#### **Marital status**

National estimates of births to unmarried women are based on two methods of determining marital status: (1) direct question and (2) inference. Beginning June 15, 1998, Connecticut discontinued inferring the mother's marital status and added a direct question on mother's marital status to the State's birth certificate.

Two States (Michigan and New York) use inferential procedures to compile birth statistics by marital status in 2001. A birth is inferred as nonmarital if either a paternity acknowledgment was received or the father's name is missing. The presence of a paternity acknowledgment is the most reliable indicator that the birth is nonmarital in the States not reporting this information directly; this is now the key indicator in the nonreporting States.

The procedures for reporting marital status in California, Nevada, and New York City changed beginning January 1, 1997. Marital status of women giving birth in California and Nevada is determined by a direct question in the birth-registration process. Mother's marital status is still inferred in New York City, but the procedures for inferring this information changed and are now consistent with the rest of New York State. The methods used to determine marital status and the impact of the procedures on the data were discussed in detail in a previous report (15).

In 2001 the mother's marital status was not reported on 0.03 percent of the birth records

in States reporting this information from a direct question. Marital status was imputed as "married" for these records.

When births to unmarried women are reported as second or higher order births, it is not known whether the mother was married or unmarried when the previous deliveries occurred because her marital status at the time of these earlier births is not available from the birth record.

#### Place of delivery and attendant at birth

The 1989 revision of the U.S. Standard Certificate of Live Birth included separate categories for freestanding birthing centers, the mother's residence, and clinic or doctor's office as the place of birth. Beginning in 1989, births occurring in clinics and in birthing centers not attached to a hospital are classified as "Not in hospital." This change in classification may account in part for the lower proportion of "In hospital" births compared with previous years. (The change in classification of clinics should have minor impact because comparatively few births occur in these facilities, but the effect of any change in classification of freestanding birthing centers is unknown.)

Beginning in 1975 the attendant at birth and place of delivery items were coded independently, primarily to permit the identification of the person in attendance at hospital deliveries. Additional information on these items is presented elsewhere (2).

Babies born on the way to or upon arrival at the hospital are classified as having been born in the hospital. This may account for some of the hospital births not delivered by physicians or midwives. The "Not in hospital" category includes births for which no place of birth information is reported.

In 2000, Illinois started collecting data on certified nurse-midwives (CNM) and making corrections for "other midwife" and "other" categories. Data for earlier years were incomplete for Illinois births. As a result, the number of CNMs reported has significantly increased while "other midwife" has sharply decreased when compared to earlier years.

Procedures in some hospitals may require that a physician be listed as the attendant for every birth and that a physician sign each birth certificate, even if the birth is attended by a midwife and no physician is physically present. Therefore, the number of live births attended by midwives may be understated in some areas.

#### **Birthweight**

In some areas birthweight is reported in pounds and ounces rather than in grams. However, the metric system has been used in tabulating and presenting the statistics to facilitate comparison with data published by other groups. The categories for birthweight were changed in 1979 to be consistent with recommendations in the *Ninth Revision of the International Classification of Diseases* (ICD–9) and remain the same for the *Tenth Revision of the International Classification of Diseases* (ICD–10) (5). The categories in gram intervals and their equivalents in pounds and ounces are as follows:

```
Less than 500 grams = 1 lb 1 oz or less
500–999 grams = 1 lb 2 oz–2 lb 3 oz
1,000–1,499 grams = 2 lb 4 oz–3 lb 4 oz
1,500–1,999 grams = 3 lb 5 oz–4 lb 6 oz
2,000–2,499 grams = 4 lb 7 oz–5 lb 8 oz
```

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2,500–2,999 grams = 5 lb 9 oz–6 lb 9 oz

3,000–3,499 grams = 6 lb 10 oz–7 lb 11 oz

3,500–3,999 grams = 7 lb 12 oz–8 lb 13 oz

4,000–4,499 grams = 8 lb 14 oz–9 lb 14 oz

4,500–4,999 grams = 9 lb 15 oz–11 lb 0 oz

5,000 grams or more = 11 lb 1 oz or more
```

ICD–9 and ICD–10 define low birthweight as less than 2,500 grams. This is a shift of 1 gram from the previous criterion of 2,500 grams or less, which was recommended by the American Academy of Pediatrics in 1935 and adopted in 1948 by the World Health Organization in the *Sixth Revision of the International Lists of Diseases and Causes of Death*.

After data classified by pounds and ounces are converted to grams, median weights are computed and rounded before publication. To establish the continuity of class intervals needed to convert pounds and ounces to grams, the end points of these intervals are assumed to be half an ounce less at the lower end and half an ounce more at the upper end. For example, 2 lb 4 oz–3 lb 4 oz is interpreted as 2 lb 3 ½ oz–3 lb 4½ oz.

Births for which birthweight is not reported are excluded from the computation of percents and medians.

#### **Period of gestation**

The period of gestation is defined as beginning with the first day of the last normal menstrual period (LMP) and ending with the day of the birth. LMP is used as the initial date because it can be more accurately determined than the date of conception, which usually occurs 2 weeks after the LMP.

Births occurring before 37 completed weeks of gestation are considered to be "preterm" or "premature" for purposes of classification. At 37–41 weeks gestation, births are considered to be "term," and at 42 completed weeks and over, "postterm." These distinctions are according to the ICD–9 and ICD–10 definitions (5).

The 1989 revision of the U.S. Standard Certificate of Live Birth included a new item, "clinical estimate of gestation." This item is compared with length of gestation computed from the LMP date when the latter appears to be inconsistent with birthweight. This is done for normal weight births of apparently short gestations and for very low birthweight births reported to be full term. The use of the clinical estimate in the 2001 data file is described in the Technical Notes of "Births: Final Data for 2001" (3).

Before 1981, the period of gestation was computed only when there was a valid month, day, and year of LMP. However, length of gestation could not be determined from a substantial number of live-birth certificates each year because the day of LMP was missing. Beginning in 1981, weeks of gestation have been imputed for records with missing day of LMP when there is a valid month and year. The imputation procedure and its effect on the data are described elsewhere (2, 16).

Because of postconception bleeding or menstrual irregularities, the presumed date of LMP may be in error. In these instances, the computed gestational period may be longer or shorter than the true gestational period, but the extent of such errors is unknown.

#### Month of pregnancy prenatal care began

When the name of the month is entered for this item instead of "first," "second," "third," and so forth, the month of pregnancy in which prenatal care began is determined from the month named and the month last normal menses began. For these births, if "Date last normal menses began" is not stated, the month of pregnancy in which prenatal care began is tabulated as not stated.

#### **Number of prenatal visits**

Tabulations of the number of prenatal visits were presented for the first time in 1972. Beginning in 1989 these data were collected from the birth certificates of all States. Percent distributions and the median number of prenatal visits exclude births to mothers who had no prenatal care.

#### Apgar score

The Apgar score is a useful measure of the need for resuscitation and a predictor of the infant's chances of surviving the first year of life. It is a summary measure of the infant's condition based on heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these factors is given a score of 0, 1, or 2; the sum of these five values is the Apgar score, which ranges from 0 to 10. A score of 10 is optimum, and a low score raises some concerns about the potential survival and subsequent health of the infant.

The 1- and 5-minute Apgar scores were added to the U.S. Standard Certificate of Live Birth in 1978 to evaluate the condition of the newborn infant at 1 and 5 minutes after birth. Since 1991, the reporting area for the 5-minute Apgar score has been comprised of 48 States and the District of Columbia, accounting for 78 percent of all births in the United States in 2001. (California and Texas did not have Apgar score information on their birth certificates.) Beginning in 1995, NCHS collected information only on the 5-minute Apgar score.

#### Tobacco and alcohol use during pregnancy

The checkbox format allows for classification of a mother as a smoker or drinker during pregnancy and for reporting the average number of cigarettes smoked per day and drinks consumed per week. Procedures for determining the consistency between smoking and drinking status and the quantity of cigarettes or drinks reported are described elsewhere (2).

In 2001, 49 States and the District of Columbia reported information on smoking and drinking status (not available for California). For 2001, information on number of cigarettes smoked per day was reported in a consistent manner by 46 States, the District of Columbia, and New York City (figure 4–A), accounting for 87 percent of U.S. births. Indiana and New York State (except for New York City) reported this information but in a format that was inconsistent with NCHS standards. Information was not available for California and South Dakota.

#### Weight gain during pregnancy

Weight gain is reported in pounds. A loss of weight is reported as zero gain. Computations of median weight gain were based on ungrouped data. This item was included on the certificates of 49 States and the District of Columbia; California did not report this information. This reporting area, excluding California, accounted for 87 percent of all births in the United States in 2001.

#### Medical risk factors for this pregnancy

An item on medical risk factors was included on the 1989 birth certificate, but 2 States did not report all of the 16 risk factors in 2001. Texas did not report genital herpes or uterine bleeding, and Kansas did not report Rh sensitization.

The format allows for the designation of more than one risk factor and includes a choice of "None." Accordingly, if the item is not completed, it is classified as not stated.

Definitions adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics are available elsewhere (3).

#### **Obstetric procedures**

This item includes six specific obstetric procedures. Birth records with "Obstetric procedures" left blank are considered not stated. Data on obstetric procedures were reported by all States and the District of Columbia in 2001.

Definitions adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the National Association for Public Health Statistics and Information Systems (NAPHSIS), formerly the Association for Vital Records and Health Statistics, are available elsewhere (3).

#### Complications of labor and/or delivery

The checkbox format allows for the selection of 15 specific complications and for the designation of more than one complication where appropriate. A choice of "None" is also included. Accordingly, if the item is not completed, it is classified as not stated.

All States and the District of Columbia included this item on their birth certificates in 2001. However, Texas did not report anesthetic complications or fetal distress.

Definitions adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials are available elsewhere (3).

#### **Abnormal conditions of the newborn**

This item provides information on eight specific abnormal conditions. More than one abnormal condition may be reported for a given birth, or "None" may be selected. If the item is not completed, it is tabulated as not stated. This item was included on the birth certificates of all States and the District of Columbia in 2001. However, four areas did not include all conditions. Nebraska and Texas did not report birth injury, New York City did not report assisted ventilation less than 30 minutes or assisted ventilation of 30 minutes or more, and Wisconsin did not report fetal alcohol syndrome.

Definitions adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics are available elsewhere (3).

#### Congenital anomalies of child

The data provided in this item relate to 21 specific anomalies or anomaly groups. The format allows for the identification of more than one anomaly including a choice of "None" should no anomalies be evident. The "not stated" category includes birth records for which the item is not completed.

It is well documented that congenital anomalies, except for the most visible and most severe, are incompletely reported on birth certificates (17). The completeness of reporting specific anomalies depends on how easily they are recognized in the short time between birth and birth registration.

Forty-nine States and the District of Columbia included this item on their birth certificates. (New Mexico did not). This reporting area included 99 percent of all births in the United States in 2001. The format allows for the identification of more than one anomaly including a choice of "None" should no anomalies be evident. The "not stated" category includes birth records for which the item is not completed.

In 2001 rates for other central nervous system anomalies in Arizona and Oklahoma may be overstated because of misreporting.

Definitions adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials are available elsewhere (3).

#### **Method of delivery**

The birth certificate contains a checkbox item for method of delivery. The choices include vaginal delivery, with the additional options of forceps, vacuum, and vaginal birth after previous cesarean section (VBAC), as well as a choice of primary or repeat cesarean. When only forceps, vacuum, or VBAC is checked, a vaginal birth is assumed. In 2001 this information was collected from the birth certificates of all States and the District of Columbia.

Several rates are computed for method of delivery. The overall cesarean section rate or total cesarean rate is computed as the proportion of all births that were delivered by cesarean section. The primary cesarean rate is a measure that relates the number of women having a primary cesarean birth to all women giving birth who have never had a cesarean delivery. The denominator for this rate is the sum of women with a vaginal birth excluding VBACs and women with a primary cesarean birth. The rate for VBAC delivery is computed by relating all VBAC deliveries to the sum of VBAC and repeat cesarean deliveries, that is, to women with a previous cesarean section. VBAC rates are computed for first births because the rates are computed on previous pregnancies, not just live births.

#### Hispanic parentage

The 1989 revision of the U.S. Standard Certificate of Live Births includes items to identify the Hispanic origin of the parents. All 50 States and the District of Columbia reported Hispanic origin of the parents for 2001.

In computing birth and fertility rates for the Hispanic population, births with origin of mother not stated are included with non-Hispanic births rather than being distributed. Thus, rates for the Hispanic population are underestimates of the true rates to the extent that the births with origin of mother not stated (0.6 percent in 2001) were actually to Hispanic mothers. The population with origin not stated was imputed. The effect on the rates is believed to be small.

#### **Quality of Data**

Although vital statistics data are useful for a variety of administrative and scientific

purposes, they cannot be correctly interpreted unless various qualifying factors and methods of classification are taken into account. The factors to be considered depend on the specific purposes for which the data are to be used. It is not feasible to discuss all the pertinent factors in the use of vital statistics tabulations, but some of the more important ones should be mentioned.

Most of the factors limiting the use of data arise from imperfections in the original records or from the impracticability of tabulating these data in very detailed categories. These limitations should not be ignored, but their existence does not lessen the value of the data for most general purposes.

#### **Completeness of registration**

An estimated 99 percent of all births occurring in the United States in 2001 were registered; for white births, registration was 99.5 percent complete and for all other births, 98.6 percent complete. These estimates are based on the results of the 1964–68 test of birth-registration completeness according to place of delivery (in or out of hospital) and race. (This test has not been conducted more recently.) The primary purpose of the test was to obtain current measures of registration completeness for births in and out of hospital by race on a national basis. Data for States were not available as they had been from the previous birth-registration tests in 1940 and 1950. A detailed discussion of the method and results of the 1964–68 birth-registration test is available (18). Information on procedures for adjusting births for underregistration (for cohort fertility tables) is presented elsewhere in this report (2).

#### **Completeness of reporting**

Interpretation of these data must include evaluation of item completeness. The percent in the "not stated" category is one measure of the quality of the data. Completeness of reporting varies among items and States. See table A for the percent of birth records on which specified items were not stated. Data users should note that levels of incomplete or inaccurate reporting for some of the items are quite high in some States. Data for 2001 for the District of Columbia and Washington are of particular concern.

#### **Quality control procedures**

As electronic files are received at NCHS, they are automatically checked for completeness, individual item code validity, and unacceptable inconsistencies between data items. The registration area is notified of any problems. In addition, NCHS staff review the files on an ongoing basis to detect problems in overall quality such as inadequate reporting for certain items, failure to follow NCHS coding rules, and systems and software errors. Traditionally, quality assurance procedures were limited to review and analysis of differences between NCHS and registration area code assignments for a small sample of records. In recent years, as electronic birth registration became prevalent, this procedure was augmented by analyses of year-to-year and area-to-area variations in the data. These analyses are based on preliminary tabulations of the data that are cumulated by State on a year-to-date basis each month. NCHS investigates all differences that are judged to have consequences for quality and completeness. In the review process, statistical tests are used to call initial attention to differences for possible follow-up. As necessary, registration areas are informed of differences encountered in the tables and asked to verify the counts or to determine the nature of the differences. Missing records (except those permanently voided) and other problems detected by NCHS are resolved, and

corrections are transmitted to NCHS in the same manner as for those corrections identified by the registration area.

#### Random variation and significance testing for natality data

A detailed discussion of random variation and significance testing for natality data is presented in the Technical notes of "Births: Final Data for 2001." (3) This section presents information specifically for Hispanic subgroups.

#### Computing confidence intervals for Hispanic subgroups

Birth and fertility rates for Mexicans, Puerto Ricans, Cubans, and "Other" Hispanics for 2001 are not currently available because the necessary populations estimated from the 2000 Census are not available (3). Rates for Hispanic subgroups will be reported in a special report and in tables 1–4 and 1–12 of *Vital Statistics of the United States*, part 1, Natality when the necessary populations become available.

Population estimates for Hispanic subgroups are derived from the U.S. Census Bureau's *Current Population Survey* and adjusted to resident population control totals as shown in table 4–2. As a result, the rates are subject to the variability of the denominator as well as the numerator. For these Hispanic subgroups only (not for all origin, total Hispanic, total non-Hispanic, non-Hispanic white, or non-Hispanic black populations), the following formulas are used:

#### Approximate 95 percent Confidence Interval: 100 or more births

When the number of events in the numerator is greater than 100, the confidence interval for the birth rate can be estimated from the following formulas:

For crude and age-specific birth rates,

Lower limit = 
$$R - 1.96 * R * \sqrt{\left(\frac{1}{B}\right) + f\left(a + \frac{b}{P}\right)}$$

Upper limit = 
$$R + 1.96 * R * \sqrt{\left(\frac{1}{B}\right) + f\left(a + \frac{b}{P}\right)}$$

where:

R = rate (births per 1,000 population)

B = total number of births upon which rate is based

f = factor that depends on whether the population estimate is based on demographic analysis or CPS and the number of years used, equals 0.670 for single year

a and b are single year averages of the 2000 and 2001 CPS standard error parameters (19,

20)

a = -0.000162

b = 5.648

P = total estimated population upon which rate is based

### **Example**

Suppose that the fertility rate of Cuban women 15–44 years of age was 51.2 per 1,000 based on 13,088 births in the numerator and an estimated resident population of 255,399 in the denominator. The 95 percent confidence interval would be:

Lower limit = 
$$51.2 - 1.96 * 51.2 * \sqrt{\left(\frac{1}{13,088}\right)} + 0.670 * \left[-0.000162 + \left(\frac{5,648}{255,399}\right)\right]$$
  
=  $51.2 - 1.96 * 51.2 * \sqrt{0.000076405 + \left(0.670 * 0.021952\right)}$   
=  $51.2 - 1.96 * 51.2 * \sqrt{0.014784}$   
=  $51.2 - 1.96 * 51.2 * 0.121589$   
=  $39.00$   
Upper limit =  $51.2 + 1.96 * 51.2 * \sqrt{\left(\frac{1}{13,088}\right)} + 0.670 * \left[-0.000162 + \left(\frac{5,648}{255,399}\right)\right]$   
=  $51.2 + 1.96 * 51.2 * \sqrt{0.000076405 + \left(0.670 * 0.021952\right)}$   
=  $51.2 + 1.96 * 51.2 * \sqrt{0.014784}$   
=  $51.2 + 1.96 * 51.2 * 0.121589$   
=  $63.40$ 

This means that the chances are 95 out of 100 that the actual fertility rate of Cuban women 15–44 years of age is between 39.00 and 63.40.

### Approximate 95 percent Confidence Interval: 1-99 births

When the number of events in the numerator is less than 20, an asterisk is shown in place of the rate. When the number of events in the numerator is greater than 20 but less than 100, the confidence interval for the birth rate can be estimated using the formulas that follow and the values in table C.

For crude and age-specific birth rates,

Lower limit = 
$$R * L(1-a = .96, B)* \left(1-2.576\sqrt{f(a+\frac{b}{P})}\right)$$

Upper limit = 
$$R * U(1 - a) = .96, B * \left(1 + 2.576 \sqrt{f(a + \frac{b}{P})}\right)$$

where:

R = rate (births per 1,000 population)

B = total number of births upon which rate is based

L = the value in table C that corresponds to the number B, using the 96 percent CI

column

U = the value in table C that corresponds to the number B, using the 96 percent CI column

f = factor that depends on whether the population estimate is based on demographic analysis or CPS and the number of years used, equals 0.670 for single year

a and b are CPS standard error parameters (see previous section on 95 percent confidence interval for 100 or more births for description and specific values)

P = total estimated population upon which rate is based

## Example

Suppose that the birth rate of Puerto Rican women 45–49 years of age was 0.4 per 1,000, based on 35 births in the numerator and an estimated resident population of 87,892 in the denominator. Using table C, the 95 percent confidence interval would be:

Lower limit = 
$$0.4*0.68419*\left(1-2.576\sqrt{0.670\left(-0.000162+\left(\frac{5,648}{87,892}\right)\right)}\right)$$
  
=  $0.4*0.68419*\left(1-2.576\sqrt{0.042946}\right)$   
=  $0.4*0.68419*\left(1-2.576*0.207234\right)$   
=  $0.4*0.68419*0.466165$   
=  $0.1$   
Upper limit =  $0.4*1.41047*\left(1+2.576\sqrt{0.670\left(-0.000162+\left(\frac{5,648}{87,892}\right)\right)}\right)$   
=  $0.4*1.41047*\left(1+2.576\sqrt{0.042946}\right)$   
=  $0.4*1.41047*\left(1+2.576*0.207234\right)$   
=  $0.4*1.41047*1.533835$   
=  $0.9$ 

This means that the chances are 95 out of 100 that the actual birth rate of Puerto Rican women 45–49 years of age is between 0.1 and 0.9.

NOTE: In the formulas above, the confidence limits are estimated from the nonsampling error in the number of births, the numerator, and the sampling error in the population estimate, the denominator. A 96 percent standard error is computed for the numerator, and a 99 percent standard error is computed for the denominator in order to compute a 95 percent confidence interval for the rate.

### **Significance testing for Hispanic subgroups**

When both rates are based on 100 or more events, the difference between the two rates is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two rates.

$$=1.96*\sqrt{R_1^2*\left[\left(\frac{1}{B_1}\right)+f\left(a+\frac{b}{P_1}\right)\right]+R_2^2*\left[\left(\frac{1}{B_2}\right)+f\left(a+\frac{b}{P_2}\right)\right]}$$

If the difference is greater than this statistic, then the difference would occur by chance less than 5 times out of 100. If the difference is less than this statistic, the difference might occur by chance more than 5 times out of 100. We would therefore conclude that the difference is not statistically significant at the 95 percent confidence level.

### Example

Suppose the birth rate for Puerto Rican mothers 15-19 years of age  $(R_1)$  is 80.6, based on 11,978 births and an estimated population of 148,673, and the birth rate for Cuban mothers 15-19 years of age  $(R_2)$  is 27.1, based on 997 births and an estimated population of 36,782. Using the above formula, the z score is computed as follows:

$$= 1.96 * \sqrt{80.6^{2} * \left[ \left( \frac{1}{11,978} \right) + 0.670 \left( -0.000162 + \frac{5,648}{148,673} \right) \right] + 27.1^{2} * \left[ \left( \frac{1}{997} \right) + 0.670 \left( -0.000162 + \frac{5,648}{36,782} \right) \right]}$$

$$= 1.96 * \sqrt{6,496.36 * (0.000083486 + 0.670 * 0.037827) + 734.41 * (0.001003009 + 0.670 * 0.153391)}$$

$$= 1.96 * \sqrt{(6496.36 * 0.025428) + (734.41 * 0.103775)}$$

$$= 1.96 * \sqrt{165.19 + 76.21}$$

$$= 1.96 * 15.54$$

$$= 30.46$$

Since the difference between the two rates of 53.5 is greater than the value above, the two rates are statistically significantly different at the 0.05 level of significance.

# **Computation of rates and other measures**

### **Population bases**

The rates shown in this report were computed based on population statistics prepared by the U.S. Census Bureau. Rates for 1940, 1950, 1960, 1970, 1980, and 1990 are based on the population enumerated as of April 1 in the censuses of those years. Rates for all other years are based on the estimated midyear (July 1) population for the respective years. These populations have been modified to be consistent with Office of Management and Budget racial categories and historical categories for birth data, and in the case of age, to reflect age as of the census reference date (21).

Populations in tables 4–1 through 4–4 differ from those used to calculate birth and fertility rates published in "Births: Final Data for 2001" and "Births: Final Data for 2000" (3, 22). Populations for April 1, 2000 and July 1, 2001 provided in this report were produced under a collaborative arrangement with the U.S. Census Bureau (23-25) and(23–25). They are based on the 2000 census counts by age, race, and sex, which were modified to be consistent with Office

of Management and Budget racial categories of 1977 and historical categories for birth data; in the case of age, they were modified to reflect age as of the census reference date. The modification procedures are described in detail elsewhere (21, 26 and 27).

The special report "Revised Birth and Fertility Rates for the United States, 2000 and 2001," (28) updates the rates published in "Births: Final Data for 2001" and "Births: Final Data for 2000" (3, 22). The revised birth and fertility rates in the new report include rates by race and Hispanic origin, by age of mother, and by age of father for 2000 and 2001. Rates for unmarried women are also presented. A subsequent special report (now in preparation) will show revised birth and fertility rates for the intercensal years, 1991–99, along with the rates for 2000 and 2001.

Birth rates for the United States, individual States, and metropolitan areas are based on the total resident populations of the respective areas. Revised rates for 2001 for individual States and metropolitan areas have not been computed since the necessary populations are not yet available (table 4–4). Revised State-specific population for 2000 are now available, and revised rates will be presented in the special report now in preparation. Except as noted, these populations exclude the Armed Forces abroad but include the Armed Forces stationed in each area. The resident population of the birth- and death-registration States for 1900-32 and for the United States for 1900-2001 is shown in table 4-1. In addition, the population including Armed Forces abroad is shown for the United States. Table D shows the sources for these populations. A detailed discussion of historical population bases is presented elsewhere (2).

#### **Net census undercounts and overcounts**

Studies conducted by the U.S. Census Bureau indicate that some age, race, and sex groups are more completely enumerated than others. These census miscounts can have consequences for vital statistics measures. For example, an adjustment to increase the population denominator would result in a smaller rate compared to the unadjusted rate. A more detailed discussion of census undercounts and overcounts can be found in the 1999 Technical appendix (2). Adjusted rates for 1990 can be computed by multiplying the reported rates by ratios of the 1990 census-level population adjusted for the estimated net census miscounts; these ratios are shown in table E.

### **Cohort fertility tables**

The various fertility measures shown for cohorts of women are computed from births adjusted for under-registration and population estimates corrected for under-enumeration and misstatement of age. Data published after 1974 use revised population estimates prepared by the U.S. Census Bureau and have been expanded to include data for the two major racial groups. Heuser has prepared a detailed description of the methods used in deriving these measures as well as more detailed data for earlier years (29). These tables for current years are available at <a href="http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab99.htm">http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab99.htm</a>.

Parity distribution—The percent distribution of women by parity (number of children ever born alive to mother) is derived from cumulative birth rates by order of birth. The percent of zero-parity women is obtained by subtracting the cumulative first birth rate from 1,000 and dividing by 10. The proportions of women at parities one through six are derived from the following formula:

Percent at N parity = ((cum. rate, order N)-(cum. rate, order N + 1))/10

The percent of women at seventh and higher parities is found by dividing the cumulative rate for seventh-order births by 10.

*Birth probabilities*—Birth probabilities indicate the likelihood that a woman of a certain parity and age at the beginning of the year will have a child during that year. Birth probabilities differ from central birth rates in that the denominator for birth probabilities is specific for parity as well as for age.

# **Total fertility rate**

The total fertility rate is the sum of the birth rates by age of mother (in 5-year age groups) multiplied by 5. It is an age-adjusted rate because it is based on the assumption that each age group has the same number of women. For example, a total fertility rate of 2,034 means that if a hypothetical group of 1,000 women had the same birth rates in each age group that were observed in the actual childbearing population for that year, they would have a total of 2,034 children by the time they reached the end of the reproductive period (taken here to be age 50 years), assuming that all of the women survived to that age.

### **Seasonal adjustment of rates**

Seasonally adjusted birth and fertility rates are computed from the X-11 variant of Census Method II (30). This method, used since 1964, differs slightly from the U.S. Bureau of Labor Statistics (BLS) Seasonal Factor Method, which was used for *Vital Statistics of the United States*, 1964. A comparison of the Census Method II with the BLS Seasonal Factor Method shows the differences in the seasonal patterns of births to be negligible. The fundamental technique is the same in that it is an adaptation of the ratio-to-moving-average method. (Before 1964, the method of seasonal adjustment was based on the X-9 variant and other variants of Census Method II.)

### Computations of percents, percent distributions, and medians

Births for which a particular characteristic is unknown were subtracted from the figures for total births that were used as denominators before computation of percents, percent distributions, and medians. The percent of records with missing information for each item is shown by State in table A.

The median number of prenatal visits excludes births to mothers who had no prenatal care. Computations of the median years of school completed and the median number of prenatal visits were based on ungrouped data. The median age of mother is computed from birth rates in 5-year age groups, which eliminates the effects of changes in the age composition of the childbearing population over time.

An asterisk is shown in place of any derived statistic based on fewer than 20 births in the numerator or denominator.

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Table A. Percent of Birth Records on Which Specified Items Were Not Stated: United States and Each State and territory, 2001

[By place of residence]

-	All	Place	Attendant	Mother's	Father's	Father's	Hispa	nic origin	Educational
Area	births	of birth	at birth	birthplace	age	race	Mother	Father	attainment
				·	•				of mother
Total of reporting areas 1/	4,025,933	0.0	0.0	0.3	13.5	14.1	0.6	14.1	1.4
Alabama	60,454	0.0	0.0	0.1	21.4	21.5	0.1	21.4	0.2
Alaska	10,003	0.2	0.1	0.7	12.2	13.8	8.7	17.3	3.4
Arizona	85,597	0.0	0.0	0.1	18.3	19.5	1.3	19.9	2.3
Arkansas	37,010	0.0	0.0	0.4	19.7	21.0	0.4	20.3	0.7
California	527,759	0.0	0.1	0.2	7.1	6.7	0.6	6.3	1.6
Colorado	67,007	-	0.0	0.4	8.1	8.5	0.0	8.6	
Connecticut	42,648	0.0	0.0	0.3	10.2	11.6	1.2		
Delaware	10,749	-	-	0.1	29.7	30.4	0.1	29.6	
District of Columbia	7,625	-	-	0.1	39.2	47.4	0.6		7.0
Florida	205,793	0.0	0.0	0.1	16.7	17.0	0.2		
Georgia	133,526	0.0	0.0	0.2	17.6	17.8	1.2		
Hawaii	17,072	-	0.0	0.1	9.4	9.5	0.1	9.2	
Idaho	20,688	0.0	0.0	0.7	8.2	11.7	1.9	12.4	3.1
Illinois	184,064	0.0	0.0	0.1	13.4	15.2	0.0	15.1	1.1
Indiana	86,459	0.0	0.0	0.1	12.6	12.6	0.4	12.9	0.6
lowa	37,619	-	0.0	0.0	12.6	14.3	0.3		
Kansas	38,869	0.0	0.1 0.1	0.1 0.0	10.4	11.2	1.1 0.0	11.9	0.4 0.3
Kentucky Louisiana	54,658 65,352	0.0	0.1	0.0	19.6 20.3	22.2 20.3	0.0	22.4 20.3	
Maine	13,759	0.0	0.0	0.0	8.6	12.4	0.1	10.4	0.1
Maryland	73,218	0.0	0.0	0.4	11.5	12.7	0.4	10.4	1.4
Massachusetts	81,077	0.0	0.0	0.4	7.0	7.4	0.4	6.7	0.3
Michigan	133.427	0.0	0.0	0.0	14.2	16.4	1.4	17.3	
Minnesota	67,562	0.0	0.0	0.1	9.4	13.5	0.7	13.3	2.3
Mississippi	42,282	-	0.0	0.1	22.1	22.0	0.1	22.1	0.3
Missouri	75,464	0.0	-	0.2	18.5	18.3	0.1	17.8	
Montana	10,970	-	0.2	0.0	9.8	11.0	2.9		
Nebraska	24,820	_	-	-	11.8	13.3	2.1	13.8	
Nevada	31,382	0.0	0.0	0.5	20.0	20.9	1.1	20.0	2.9
New Hampshire	14,656	-	-	0.1	5.4	7.5	4.5	10.8	1.3
New Jersey	115,795	0.0	0.0	0.1	7.9	9.5	0.3	8.3	2.9
New Mexico	27,128	-	0.0	1.3	21.0	20.5	0.0	20.5	2.9
New York	254,026	0.1	0.0	0.4	14.0	14.4	1.1	14.8	1.0
North Carolina	118,185	-	0.0	0.0	15.7	15.8	0.1	16.1	0.2
North Dakota	7,629	0.0	-	0.0	8.5	8.9	2.5	11.5	0.5
Ohio	151,570	0.0	0.0	1.1	14.9	15.5	0.2		
Oklahoma	50,118	0.0	0.0	0.0	17.5	18.8	0.2		0.3
Oregon	45,322	-	-	0.1	10.3	4.0	0.3	4.3	1.2
Pennsylvania	143,495	0.0	0.0	0.9	5.0	5.4	0.7	4.2	
Rhode Island	12,713	-	-	0.5	13.4	13.9	9.9		
South Carolina	55,756	-	-	0.1	27.1	27.3	0.1	27.1	1.1
South Dakota	10,483	- 0.0	-	0.0	13.1	13.2	0.1	13.4	0.3
Tennessee	78,340 365,410	0.0 0.0	0.0 0.0	0.1 0.5	15.3 14.2	15.5	0.0 0.3		0.3 2.0
Texas Utah	47,959	0.0	0.0	0.5		14.4 10.0	0.5	14.4 9.4	1.6
Vermont	6,366	-	-	0.2	8.4 7.6		3.0		
Virginia	98,884	-	0.0	0.1	16.6		0.2		
Washington	79,570	0.0	0.0	0.1	10.6		1.7		
West Virginia	20,428	0.0	0.0	0.5	12.7	13.1	0.3		
Wisconsin	69,072	0.0	0.0	0.1	29.5		0.0		
Wyoming	6,115	-	-	0.1	13.6		0.0		
,	5,175			0.1	10.0	14.0	3.1	10.0	0.0
Puerto Rico	55,866	0.0	0.1	-	3.4	4.2			0.3
Virgin Islands	1,669	-	0.1	-	19.4	21.0	3.1	24.7	
Guam	3,565	0.1	0.9	0.8	22.1	23.1	2.6	27.5	1.6
American Samoa	1,655	-	0.2	5.1	28.3	30.3			
Northern Marianas	1,449	-	0.3	-	7.4	4.1			3.0

Table A. Percent of Birth Records on Which Specified Items Were Not Stated: United States and Each State and territory, 2001 -- Con.

[By place of residence]

		Live-birth	Length of	Month	Number of	Birth	5-minute	Medical
Area	births	order	gestation	prenatal	prenatal	weight	apgar	risk
-				care began	visits		score	factors
Total of reporting areas 1/	4,025,933	0.3	1.0	2.4	3.1	0.1	0.4	0.9
Alabama	60,454	0.0	0.1	0.3	0.3	0.1	0.3	0.0
Alaska	10,003	2.1	0.4	4.1	7.2	0.4	0.6	2.7
Arizona	85,597	0.3	0.1	1.6	2.9	0.1	0.3	0.0
Arkansas	37,010	0.2	0.2	1.8	2.4	0.1	3.3	0.1
California	527,759	0.1	2/5.9	1.6	2.8	0.0		0.0
Colorado	67,007	0.0	0.0	1.6	2.3	0.0	0.3	0.0
Connecticut	42,648	0.7	0.2	1.9	4.1	0.0	0.6	2.4
Delaware	10,749	0.1	0.1	0.2	0.4	0.1	0.2	0.0
District of Columbia	7,625	1.1	0.3	14.3	9.6	0.0	1.0	-
Florida	205,793	0.0	0.1	1.2	2.1	0.1	0.2	0.0
Georgia	133,526	0.4	0.1	4.4	3.9	0.0	0.4	0.4
Hawaii	17,072	0.0	0.7	2.5	2.5	0.1	0.5	0.4
Idaho	20,688	0.2	0.5	6.7	4.2	0.1	0.6	0.4
Illinois	184,064	0.1	0.2		2.7	0.1	0.3	0.0
Indiana	86,459	0.1	0.1	0.9	2.2	0.4	0.3	0.1
lowa	37,619	0.0	0.1	0.5	1.4	0.1	0.3	0.1
Kansas	38,869	0.0	0.1	0.9	1.1	0.0	0.4	3/0.2
Kentucky	54,658	0.0	0.1	1.2	1.5	0.2	0.4	4.6
Louisiana	65,352	0.1	0.1 0.1	0.4 0.5	0.4	0.0	0.3	0.1 0.1
Maine	13,759 73,218	0.4 0.2	0.1	2.3	0.7	0.1 0.0	0.2 0.5	
Maryland Massachusetts	73,216 81,077	0.2	0.4	1.5	3.4 0.5	0.4	0.5	0.0 0.5
Michigan	133,427	0.3	0.4	1.9	2.5	0.4	0.4	0.0
Minnesota	67,562	0.2	0.1		4.8	0.1	0.3	8.2
Mississippi	42,282	0.3	0.3	0.6	1.1	0.0	0.4	0.2
Missouri	75,464	0.1	0.2		3.8	0.1	0.5	0.1
Montana	10,970	0.0	0.1	0.4	0.3	0.1	0.4	0.0
Nebraska	24,820	0.0	0.0	0.4	0.3	0.0	0.4	0.0
Nevada	31,382	0.8	1.0	4.1	8.1	0.0	1.1	8.6
New Hampshire	14,656	0.2	0.2	2.1	1.9	0.1	0.2	0.0
New Jersey	115,795	0.1	0.1	3.9	3.9	0.1	0.3	0.8
New Mexico	27,128	1.4	0.2	5.1	5.1	0.2	3.4	0.0
New York	254,026	0.3	0.1	4.6	2.9	0.1	0.2	2.3
North Carolina	118,185	0.0	0.0	0.6	0.6	0.0	0.3	0.0
North Dakota	7,629	0.0	0.1	0.9	0.7	0.1	0.2	0.2
Ohio	151,570	1.1	0.0	1.9	2.9	0.1	0.2	0.0
Oklahoma	50,118	0.7	0.1	1.9	0.7	0.1	1.1	1.4
Oregon	45,322	0.0	0.0		0.2	0.0	0.4	0.7
Pennsylvania	143,495	0.5	0.4		6.4	0.1	0.4	0.1
Rhode Island	12,713	1.1	0.2		3.0	0.1	0.3	6.0
South Carolina	55,756	0.1	0.1	0.9	1.0	0.0	0.2	0.0
South Dakota	10,483	-	0.0		0.3	0.0	0.3	0.0
Tennessee	78,340	0.1	0.2	1.8	1.9	0.0	0.2	0.0
Texas	365,410	1.1	0.9	3.2	6.7	0.1		6/1.2
Utah	47,959	0.3	0.1	2.2	2.8	0.1	0.3	0.1
Vermont	6,366	0.5	0.2		2.2	0.3	0.3	0.3
Virginia	98,884	0.0	0.0		1.1	0.1	0.2	0.0
Washington West Virginia	79,570 20,428	1.4 0.0	0.8 0.1		9.7 2.0	0.3 0.1	0.6 0.3	12.7 1.9
Wisconsin	69,072	0.0	0.1		2.0 0.4	0.0	0.3	0.1
Wyoming	6,115	-	0.0	0.3	0.4	0.0	0.4	0.1
-					ا			
Puerto Rico	55,866	0.0	0.1	0.3	0.1	0.0	0.1	0.0
Virgin Islands	1,669	1.3	0.6		2.0	0.1	2.2	2.5
Guam	3,565	1.5	0.2	1.7	2.6	0.2	0.9	2.1
American Samoa Northern Marianas	1,655 1,449	0.7	0.8	2.0	2.1	0.6	1.5	

Table A. Percent of Birth Records on Which Specified Items Were Not Stated: United States and Each State and territory, 2001 -- Con.

[By place of residence]

	ΛII	Tabasas	Alaahal	Moight	Obstatria	Complications	Mathad	Abnormal	Congonital
Area	All births	Tobacco use	Alcohol use	Weight gain	Obstetric procedures	Complications of labor and/or	Method of	Abnormal conditions	Congenital anomalies
Alea	DITUIS	use	use	gairi	procedures	delivery	delivery	of newborn	anomanes
Total of reporting areas 1/	4,025,933	0.7	0.9	7.0	0.5	0.6	0.5	1.0	0.9
	, , , , , , , ,								
Alabama	60,454	0.1	0.1	3.6	0.0	0.0	0.4	0.0	0.0
Alaska	10,003	0.9	1.1	7.6	2.6	2.8	0.5	2.3	2.2
Arizona	85,597	1.2	1.3	17.3	0.0	0.0	0.4	0.0	11/0.3
Arkansas	37,010	0.7	0.8	7.7	0.1	0.1	0.3	0.1	0.1
California	527,759				0.0	0.0	0.0	0.0	0.0
Colorado	67,007	0.3	0.3	3.4	0.0	0.0	-	0.0	0.2
Connecticut	42,648	1.0	1.1	6.9	2.3	2.1	0.6	2.7	2.8
Delaware	10,749	0.1	0.1	0.8	0.0	-	0.0	0.0	-
District of Columbia	7,625	0.0	0.0	15.1	-	-	0.1	0.0	-
Florida	205,793	0.1	0.1	5.8	0.0	0.0	0.7	0.0	0.0
Georgia	133,526	0.5	0.5	10.0	0.0	0.0	0.5	0.0	0.0
Hawaii	17,072	0.1	0.1	14.4	0.2	0.3	0.4	0.2	0.2
Idaho	20,688	0.6	0.7	10.9	0.3	0.4	0.5	0.6	0.7
Illinois	184,064	0.2	0.1	4.3	0.0	0.0	0.4	0.0	0.1
Indiana	86,459	4/0.2	0.2	2.8	0.0	0.1	0.5	0.1	0.1
lowa	37,619	0.1	0.1	0.7	0.0	0.1	0.5	0.0	0.1
Kansas	38,869	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.2
Kentucky	54,658	2.7	3.2	8.0	2.5	4.7	3.2	6.8	5.5
Louisiana	65,352	0.1	0.1	5.6	0.1	0.1	0.2 0.2	0.1	0.1
Maine	13,759	0.9	1.3 0.2	1.7 4.5	0.0 0.0	0.1 0.0	0.2	0.1 0.0	0.1 0.0
Maryland Massachusetts	73,218 81,077	0.2 0.3	0.2	4.5 0.8	0.0	0.5	0.2	0.6	0.0
Michigan	133,427	1.1	1.1	7.7	0.0	0.0	0.6	0.0	0.9
Minnesota	67,562	8.1	8.2	17.9	6.4	8.1	2.6	9.2	9.2
Mississippi	42,282	0.1	0.2	5.6	0.0	0.1	0.3	0.0	0.0
Missouri	75,464	0.3	0.3	3.1	0.0	0.1	0.6	0.0	0.0
Montana	10,970	0.4	1.1	1.0	0.1	0.0	0.0	0.1	0.0
Nebraska	24,820	0.0	0.0	1.6	0.0	0.0	0.3	7/0.0	0.0
Nevada	31,382	1.6	1.6	7.7	1.5	4.1	1.2	3.1	7.8
New Hampshire	14,656	0.6	0.6	4.2	0.0	0.0	0.4	0.0	0.1
New Jersey	115,795	0.7	0.8	5.8	0.1	0.6	0.6	4.3	2.1
New Mexico	27,128	1.3	1.4	8.8	0.0	0.0	0.5	0.0	
New York	254,026	4/0.2	0.2	5.9	0.3	0.5	0.4	8/2.3	2.2
North Carolina	118,185	0.2	0.2	2.3	0.0	0.0	0.5	0.0	0.0
North Dakota	7,629	0.5	0.9	2.9	0.2	0.1	1.8	0.2	0.2
Ohio	151,570	0.3	0.3	3.2	0.0	0.0	0.6	0.0	0.0
Oklahoma	50,118	0.8	0.9	1.7	1.3	1.6	1.6	2.9	11/3.0
Oregon	45,322	0.8	0.8	1.9	0.0	0.0	0.5	0.0	0.0
Pennsylvania	143,495	0.9	1.0	11.1	0.0	0.0	0.0	0.1	0.0
Rhode Island	12,713	1.7	1.8	13.2	6.2	6.0	0.4	10.8	10.9
South Carolina	55,756	0.1	0.1	1.6	0.0	0.0	0.7	0.0	0.0
South Dakota	10,483	5/0.1	5/0.2	1.1	-	0.0	0.3	0.0	0.0
Tennessee	78,340	0.2	0.2	9.3	0.0	0.0	0.5	0.0	0.0
Texas	365,410	1.1	1.1	12.6	0.0	9/0.0	0.7	7/0.0	0.1
Utah	47,959	0.7	0.7	4.1	0.0	0.0	0.0	0.1	0.1
Vermont	6,366	0.9	0.5	2.7	0.3	0.3	0.1	0.3	0.3
Virginia	98,884	0.0	0.0	3.6	0.0		0.3		0.0
Washington	79,570	2.5	9.7	23.8	10.1	11.9	0.4		12.5
West Virginia	20,428	0.8	1.4	9.1	0.2	1.0	0.3	3.1	0.7
Wisconsin	69,072	0.1	0.1	2.2	0.0	0.1	0.0		0.1
Wyoming	6,115	0.2	0.2	1.8	-	-	0.0	-	0.0
Puerto Rico	55,866	0.0	0.0	0.1	0.1	0.1	0.0		0.1
Virgin Islands	1,669	0.4	0.5	16.2	1.4	2.9	0.9		3.8
Guam	3,565	0.5	0.6	4.8	1.1	3.2	0.4	2.3	2.2
American Samoa	1,655								
Northern Marianas	1,449	5/0.6	5/0.6				1.6		

<sup>0.0</sup> Quantity more than zero but less than 0.05.

<sup>-</sup> Quantity zero.

<sup>---</sup> Data not available.

<sup>1/</sup> Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas.

<sup>2/</sup> California reports date last normal menses began but does not report clinical estimate of gestation.

 $<sup>\</sup>ensuremath{\mathsf{3}}\xspace$  Kansas does not report Rh sensitization.

<sup>4/</sup> Indiana and New York State report tobacco use but do not report the average number of cigarettes smoked per day in standard categories; data for New York City are reported in standard categories.

<sup>5/</sup> South Dakota and the Commonwealth of the Northern Marianas report tobacco and alcohol use but do not report the average number of cigarettes smoked per day or the average number of drinks per week.

<sup>6/</sup> Texas does not report genital herpes or uterine bleeding.

<sup>7/</sup> Nebraska and Texas do not report birth injury.

<sup>8/</sup> New York City does not report assisted ventilation less than 30 minutes or assisted ventilation of 30 minutes or more.

<sup>9/</sup> Texas does not report anesthetic complications and fetal distress.

<sup>10/</sup> Wisconsin does not report fetal alcohol syndrome.

<sup>11/</sup> Rates of "Other central nervous system anomalies" may be overstated for Arizona and Oklahoma for 2001.

Table B. Births by State of occurrence and residence for births occurring in the 50 States and the District of Columbia, 2001

Area	Occurrence	Residence
United States	4,031,531	4,025,93
Alabama	59,766	60,45
Alaska	9,907	10,00
Arizona	85,757	85,59
Arkansas	36,301	37,01
California	528,539	527,75
Colorado	67,100	67,00
Connecticut	43,179	42,64
Delaware	11,360	10,74
District of Columbia	15,037	7,62
Florida	205,991	205,79
Georgia	134,402	133,52
Hawaii	17,127	17,07
Idaho	20,161	20,68
Illinois	181,086	184,06
Indiana	86,710	86,45
lowa	37,756	37,61
Kansas	39,052	38,86
Kentucky	53,227	54,65
Louisiana	65,620	65,35
Maine	13,567	13,75
Maryland	68,663	73,21
Massachusetts	82,237	81,07
Michigan	132,159	133,42
Minnesota	67,428	67,56
Mississippi	41,145	42,28
Missouri	76,690	75,46
Montana	10,935	10,97
Nebraska	25,107	24,82
Nevada	31,007	31,38
New Hampshire	14,055	14,65
New Jersey	112,639	115,79
New Mexico New York State only	26,808 131,017	27,12
New York City only	124,012	134,40 119,61
North Carolina	119,132	118,18
North Dakota	8,839	7,62
Ohio	152,033	151,57
Oklahoma	48,895	50,11
Oregon	46,200	45,32
Pennsylvania	143,957	143,49
Rhode Island	13,319	12,71
South Carolina	53,255	55,75
South Dakota	10,784	10,48
Tennessee	83,521	78,34
Texas	370,482	365,41
Utah	49,041	47,95
Vermont	6,149	6,36
Virginia	96,535	98,88
Washington	79,078	79,57
West Virginia	21,000	20,42
Wisconsin	68,006	69,07
Wyoming	5,758	6,11
Occurrence in U.S. Territories or Foreign Countries	-	5,59
-		
Puerto Rico	-	1
Virgin Islands	-	4
Guam	-	
American Samoa	-	
Northern Marianas	-	
Canada	-	20
Cuba	-	4.70
Mexico Remainder of world	-	4,70
PARAGINAGE OF WORLD	-	61

<sup>-</sup> Quantity zero.

Table C. Lower and upper 95 percent and 96 percent confidence limit factors for a birth rate based on a Poisson variable of 1 through 99 births,  ${\it B}$ 

В	L(1- a=.95,B)	U(1-a=.95,B)	L(1- a = .96,B)	U(1- a = .96,B)
1	0.02532	5.57164	0.02020	5.83392
2	0.12110	3.61234	0.10735	3.75830
3	0.20622	2.92242	0.18907	3.02804
4	0.27247	2.56040	0.25406	2.64510
5	0.32470	2.33367	0.30591	2.40540
6	0.36698	2.17658	0.34819	2.23940
7	0.40205	2.06038	0.38344	2.11666
8	0.43173	1.97040	0.41339	2.02164
9	0.45726	1.89831	0.43923	1.94553
10	0.47954	1.83904	0.46183	1.88297
11	0.49920	1.78928	0.48182	1.83047
12	0.51671	1.74680	0.49966	1.78566
13	0.53246	1.71003	0.51571	1.74688
14	0.54671	1.67783	0.53027	1.71292
15	0.55969	1.64935	0.54354	1.68289
16	0.57159	1.62394	0.55571	1.65610
17	0.58254	1.60110	0.56692	1.63203
18	0.59266	1.58043	0.57730	1.61024
19	0.60207	1.56162	0.58695	1.59042
20	0.61083	1.54442	0.59594	1.57230
21	0.61902	1.52861	0.60435	1.55563
22	0.62669	1.51401	0.61224	1.54026
23	0.63391	1.50049	0.61966	1.52602
24	0.64072	1.48792	0.62666	1.51278
25	0.64715	1.47620	0.63328	1.50043
26	0.65323	1.46523	0.63954	1.48888
27	0.65901	1.45495	0.64549	1.47805
28	0.66449	1.44528	0.65114	1.46787
29	0.66972	1.43617	0.65652	1.45827
30	0.67470	1.42756	0.66166	1.44922
31	0.67945	1.41942	0.66656	1.44064
32	0.68400	1.41170	0.67125	1.43252
33	0.68835	1.40437	0.67575	1.42480
34	0.69253	1.39740	0.68005	1.41746
35	0.69654	1.39076	0.68419	1.41047
36	0.70039	1.38442	0.68817	1.40380
37	0.70409	1.37837	0.69199	1.39743
38	0.70766	1.37258	0.69568	1.39134
39	0.71110	1.36703	0.69923	1.38550
40	0.71441	1.36172	0.70266	1.37991
41	0.71762	1.35661	0.70597	1.37454
42	0.72071	1.35171	0.70917	1.36938
43	0.72370	1.34699	0.71227	1.36442
44	0.72660	1.34245	0.71526	1.35964
45	0.72941	1.33808	0.71816	1.35504
46	0.73213	1.33386	0.72098	1.35060
47	0.73476	1.32979	0.72370	1.34632
48	0.73732	1.32585	0.72635	1.34218
49	0.73981	1.32205	0.72892	1.33818
50	0.74222	1.31838	0.73142	1.33431

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Table C. Lower and upper 95 percent and 96 percent confidence limit factors for a birth rate based on a Poisson variable of 1 through 99 births,  $B\,$  --Con.

В	L(1- a=.95,B)	U(1-a=.95,B)	L(1- a = .96,B)	U(1- a =.96,B)
51	0.74457	1.31482	0.73385	1.33057
52	0.74685	1.31137	0.73621	1.32694
53	0.74907	1.30802	0.73851	1.32342
54	0.75123	1.30478	0.74075	1.32002
55	0.75334	1.30164	0.74293	1.31671
56	0.75539	1.29858	0.74506	1.31349
57	0.75739	1.29562	0.74713	1.31037
58	0.75934	1.29273	0.74916	1.30734
59	0.76125	1.28993	0.75113	1.30439
60	0.76311	1.28720	0.75306	1.30152
61	0.76492	1.28454	0.75494	1.29873
62	0.76669	1.28195	0.75678	1.29601
63	0.76843	1.27943	0.75857	1.29336
64	0.77012	1.27698	0.76033	1.29077
65	0.77178	1.27458	0.76205	1.28826
66	0.77340	1.27225	0.76373	1.28580
67	0.77499	1.26996	0.76537	1.28340
68	0.77654	1.26774	0.76698	1.28106
69	0.77806	1.26556	0.76856	1.27877
70	0.77955	1.26344	0.77011	1.27654
71	0.78101	1.26136	0.77162	1.27436
72	0.78244	1.25933	0.77310	1.27223
73	0.78384	1.25735	0.77456	1.27014
74	0.78522	1.25541	0.77598	1.26810
75	0.78656	1.25351	0.77738	1.26610
76	0.78789	1.25165	0.77876	1.26415
77	0.78918	1.24983	0.78010	1.26223
78	0.79046	1.24805	0.78143	1.26036
79	0.79171	1.24630	0.78272	1.25852
80	0.79294	1.24459	0.78400	1.25672
81	0.79414	1.24291	0.78525	1.25496
82	0.79533	1.24126	0.78648	1.25323
83	0.79649	1.23965	0.78769	1.25153
84	0.79764	1.23807	0.78888	1.24987
85	0.79876	1.23652	0.79005	1.24824
86	0.79987	1.23499	0.79120	1.24664
87	0.80096	1.23350	0.79233	1.24507
88	0.80203	1.23203	0.79344	1.24352
89	0.80308	1.23059	0.79453	1.24201
90	0.80412	1.22917	0.79561	1.24052
91	0.80514	1.22778	0.79667	1.23906
92	0.80614	1.22641	0.79771	1.23762
93	0.80713	1.22507	0.79874	1.23621
94	0.80810	1.22375	0.79975	1.23482
95	0.80906	1.22245	0.80074	1.23345
96	0.81000	1.22117	0.80172	1.23211
97	0.81093	1.21992	0.80269	1.23079
98	0.81185	1.21868	0.80364	1.22949
99	0.81275	1.21746	0.80458	1.22822

Table D. Sources for resident population and population including Armed Forces abroad: Birth- and death-registration States, 1900-32, and United States, 1900-2001.

Year	Source
2001	U.S. Census Bureau. Monthly National Population Estimates. Washington, DC: U.S. Census Bureau. Internet release, November 26, 2002.
	Http://eire.census.gov/popest/data/national/tables/NA-EST2001-04.php
2000	U.S. Census Bureau. Monthly National Population Estimates. Washington, DC: U.S. Census Bureau. Internet release, November 26, 2002.
	Http://eire.census.gov/popest/data/national/tables/NA-EST2001-04.php
1999	U.S. Census Bureau, United States population estimates, by age, sex, race, and Hispanic origin: 1980 to 1999. Washington: U.S. Bureau of the Census. Internet release, April
	11, 2000. Http://www.census.gov/population/www/estimates/nat_90s_1.html.
1998	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington: U.S. Bureau of the Census. Internet release,
	June 4, 1999. Http://www.census.gov/population/www/estimates/uspop.html.
1997	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. PPL-91R. Rounded populations consistent with U.S.
	Bureau of the Census file NESTV97. Washington: U.S. Department of Commerce. 1998.
1996	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1996. PPL-57. Washington: U.S. Department of Commerce.
	1997.
1995	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1995. Census file RESD0795, PPL-41. Washington: U.S.
1001	Department of Commerce. 1996.
1994	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1994. PPL-21. Washington: U.S. Department of Commerce. 1995.
1993	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1993. Census file RESO793. Washington: U.S. Department of
1993	Commerce, 1995.
1992	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1992. Census file RESPO792. Washington: U.S. Department of
1992	Commerce. 1994.
1991	U.S. Bureau of the Census, Unpublished data consistent with Current Population Reports, Series P-25, No. 1095, Feb. 1993.
1990	U.S. Bureau of the Census, Unpublished data from the 1990 census. 1990 CPH-L-74 and unpublished data consistent with Current Population Reports, Series P-25, No. 1095,
1000	Feb. 1993.
1989	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1057, Mar. 1990.
1988	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1045, Jan. 1990.
1986-87	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1022, Mar. 1988.
1985	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1000, Feb. 1987.
1984	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 985, Apr. 1986.
1983	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 965, Mar. 1985.
1982	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 949, May 1984.
1981	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 929, May 1983.
1980	U.S. Bureau of the Census, U.S. Census of Population: 1980, Number of Inhabitants, PC80-1-A1, United States Summary, 1983.
1971-79	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 917, July 1982.
1970	U.S. Bureau of the Census, U.S. Census of Population: 1970, Number of Inhabitants, Final Report PC(1)-A1, United States Summary, 1971.
1961-69	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 519, April 1974.
1960	U.S. Bureau of the Census, U.S. Census of Population: 1960, Number of Inhabitants, PC(1)-A1, United States Summary, 1964.
1951-59	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 310, June 30, 1965.
1940-50	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 499, May 1973.
1930-39	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 499, May 1973, and National Office of Vital Statistics, Vital Statistics Rates in the United States, 1900-
	1940, 1947.
1920-29	National Office of Vital Statistics, Vital Statistics Rates in the United States, 1900-1940, 1947.
1917-19	Same as for 1930-39.
<u> 1900-1916</u>	Same as for 1920-29.

Table E. Ratio of census-level resident population to resident population adjusted for estimated net census undercount by age, sex, and race: United States, April 1, 1990

Total				White		Black			
Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
0.9815	0.9721	0.9906	0.9802	0.9728	0.9873	0.9432	0.9151	0.9699	
0.9882	0.9891	0.9873	0.9830	0.9841	0.9818	0.9591	0.9586	0.9595	
1.0166	1.0198	1.0133	1.0094	1.0128	1.0059	0.9988	1.0016	0.9959	
1.0002	0.9987	1.0017	0.9975	0.9985	0.9966	0.9593	0.9432	0.9753	
0.9591	0.9439	0.9748	0.9558	0.9441	0.9681	0.9123	0.8732	0.9510	
0.9687	0.9487	0.9892	0.9669	0.9518	0.9828	0.9129	0.8599	0.9651	
0.9790	0.9628	0.9954	0.9764	0.9643	0.9888	0.9303	0.8808	0.9778	
0.9901	0.9758	1.0044	0.9875	0.9764	0.9988	0.9410	0.8943	0.9850	
0.9775	0.9633	0.9916	0.9762	0.9648	0.9877	0.9302	0.8807	0.9762	
	0.9623			0.9651			0.8802		
	0.9758			0.9783			0.9294		
		0.9954			0.9890			0.9739	
	0.9710			0.9710			0.9046		
	0.9815 0.9882 1.0166 1.0002 0.9591 0.9687 0.9790 0.9901 0.9775	Both sexes         Male           0.9815         0.9721           0.9882         0.9891           1.0166         1.0198           1.0002         0.9987           0.9591         0.9439           0.9687         0.9487           0.9790         0.9628           0.9901         0.9758           0.9775         0.9633            0.9758            0.9758            0.9758	Both sexes         Male         Female           0.9815         0.9721         0.9906           0.9882         0.9891         0.9873           1.0166         1.0198         1.0133           1.0002         0.9987         1.0017           0.9591         0.9439         0.9748           0.9687         0.9487         0.9892           0.9790         0.9628         0.9954           0.9901         0.9758         1.0044           0.9775         0.9633         0.9916            0.9758             0.9758             0.9758             0.9758	Both sexes         Male         Female         Both sexes           0.9815         0.9721         0.9906         0.9802           0.9882         0.9891         0.9873         0.9830           1.0166         1.0198         1.0133         1.0094           1.0002         0.9987         1.0017         0.9975           0.9591         0.9439         0.9748         0.9558           0.9687         0.9487         0.9892         0.9669           0.9790         0.9628         0.9954         0.9764           0.9901         0.9758         1.0044         0.9875           0.9623               0.9758              0.9758              0.9758              0.9758              0.9758              0.9758              0.9758              0.9758              0.9758<	Both sexes         Male         Female         Both sexes         Male           0.9815         0.9721         0.9906         0.9802         0.9728           0.9882         0.9891         0.9873         0.9830         0.9841           1.0166         1.0198         1.0133         1.0094         1.0128           1.0002         0.9987         1.0017         0.9975         0.9985           0.9591         0.9439         0.9748         0.9558         0.9441           0.9687         0.9487         0.9892         0.9669         0.9518           0.9790         0.9628         0.9954         0.9764         0.9643           0.9901         0.9758         1.0044         0.9875         0.9764           0.9775         0.9633         0.9916         0.9762         0.9648            0.9623           0.9763            0.9758           0.9783            0.9758           0.9783	Both sexes         Male         Female         Both sexes         Male         Female           0.9815         0.9721         0.9906         0.9802         0.9728         0.9873           0.9882         0.9891         0.9873         0.9830         0.9841         0.9818           1.0166         1.0198         1.0133         1.0094         1.0128         1.0059           1.0002         0.9987         1.0017         0.9975         0.9985         0.9966           0.9591         0.9439         0.9748         0.9558         0.9441         0.9681           0.9687         0.9487         0.9892         0.9669         0.9518         0.9828           0.9790         0.9628         0.9954         0.9764         0.9643         0.9888           0.9901         0.9758         1.0044         0.9875         0.9764         0.9988           0.9775         0.9633         0.9916         0.9762         0.9648         0.9877            0.9623           0.9783             0.9758           0.9783             0.9758	Both sexes         Male         Female         Both sexes         Male         Female         Both sexes           0.9815         0.9721         0.9906         0.9802         0.9728         0.9873         0.9432           0.9882         0.9891         0.9873         0.9830         0.9841         0.9818         0.9591           1.0166         1.0198         1.0133         1.0094         1.0128         1.0059         0.9988           1.0002         0.9987         1.0017         0.9975         0.9985         0.9966         0.9593           0.9591         0.9439         0.9748         0.9558         0.9441         0.9681         0.9123           0.9687         0.9487         0.9892         0.9669         0.9518         0.9828         0.9129           0.9790         0.9628         0.9954         0.9764         0.9643         0.9888         0.9303           0.9901         0.9758         1.0044         0.9875         0.9764         0.9988         0.9410           0.9775         0.9623           0.9651              0.99758           0.9783        <	Both sexes         Male         Female         Both sexes         Male         Female         Both sexes         Male           0.9815         0.9721         0.9906         0.9802         0.9728         0.9873         0.9432         0.9151           0.9882         0.9891         0.9873         0.9830         0.9841         0.9818         0.9591         0.9586           1.0166         1.0198         1.0133         1.0094         1.0128         1.0059         0.9988         1.0016           1.0002         0.9987         1.0017         0.9975         0.9985         0.9966         0.9593         0.9432           0.9591         0.9439         0.9748         0.9558         0.9441         0.9681         0.9123         0.8732           0.9687         0.9487         0.9892         0.9669         0.9518         0.9828         0.9129         0.8599           0.9790         0.9628         0.9954         0.9764         0.9643         0.9888         0.9303         0.8808           0.9975         0.9633         0.9916         0.9762         0.9648         0.9877         0.9302         0.8807            0.9758           0.9651	

<sup>...</sup> Category not applicable.

Table 4-1. Population of birth- and death-registration States, 1900-32, and United States, 1900-2001

[Population enumerated as of April 1 for 1940, 1950, 1960, 1970, 1980, 1990, and 2000 and estimated as of July 1 for all other years]

	United S	tates/1		United 9	States/1	Birth-regist	ration States	Death-registration States		
	Population	_		Population	_					
Year	including	Population	Year	including	Population	Number	Population	Number	Population	
	Armed Forces	residing		Armed Forces	residing	of	residing	of	residing	
	abroad	in area		abroad	in area	States/2	in area	States/2	in area	
2001	285,024,000	284,796,887	1950	151,132,000	150,697,361					
2000	281,652,000	281,421,906	1949	149,188,000	148,665,000					
1999/3	272,945,300	272,690,813		146,631,000	146,093,000					
1998/3	270,509,187	270,298,524	1947	144,126,000	143,446,000					
1997/3	267,901,000	267,636,061	1946	141,389,000	140,054,000					
1996/3	265,556,890	265,283,783	1945	139,928,000	132,481,000					
1995/3	263,033,968	262,755,270	1944	138,397,000	132,885,000					
1994/3	260,650,690	260,340,990	1943	136,739,000	134,245,000				• • •	
1993/3	258,119,768	257,783,004	1942	134,860,000	133,920,000				• • •	
1992/3	255,457,501	255,077,536	1941	133,402,000	133,121,000					
1991/3	252,688,000	252,177,000	1940	131,820,000	131,669,275					
1990	249,225,000	248,709,873	1939	131,028,000	130,879,718					
1989	247,342,000	246,819,000	1938	129,969,000	129,824,939				• • •	
1988	245,021,000	244,499,000	1937	128,961,000	128,824,829				• • •	
1987	242,804,000	242,289,000	1936	128,181,000	128,053,180					
1986	240,651,000	240,133,000	1935	127,362,000	127,250,232					
1985	238,466,000	237,924,000	1934	126,485,000	126,373,773					
1984	236,348,000	235,825,000	1933	125,690,000	125,578,763					
1983	234,307,000	233,792,000	1932	124,949,000	124,840,471	47	118,903,899	47	118,903,899	
1982	232,188,000	231,664,000	1931	124,149,000	124,039,648	46	117,455,229	47	118,148,987	
1981	229,966,000	229,466,000	1930	123,188,000	123,076,741	46	116,544,946	47	117,238,278	
1980	227,061,000	226,545,805	1929		121,769,939	46	115,317,450	46	115,317,450	
1979	225,055,000	224,567,000	1928		120,501,115	44	113,636,160	44	113,636,160	
1978	222,585,000	222,095,000	1927		119,038,062	40	104,320,830	42	107,084,532	
1977	220,239,000	219,760,000	1926		117,399,225	35	90,400,590	41	103,822,683	
1976	218,035,000	217,563,000	1925		115,831,963	33	88,294,564	40	102,031,555	
1975	215,973,000	215,465,000	1924		114,113,463	33	87,000,295	39	99,318,098	
1974	213,854,000	213,342,000	1923		111,949,945	30	81,072,123	38	96,788,197	
1973	211,909,000	211,357,000	1922		110,054,778	30	79,560,746	37	92,702,901	
1972	209,896,000	209,284,000	1921		108,541,489	27	70,807,090	34	87,814,447	
1971	207,661,000	206,827,000	1920		106,466,420	23	63,597,307	34	86,079,263	
1970	204,270,000	203,211,926	1919	105,063,000	104,512,110	22	61,212,076	33	83,157,982	
1969	202,677,000	201,385,000	1918	104,550,000	103,202,801	20	55,153,782	30	79,008,412	
1968	200,706,000	199,399,000	1917	103,414,000	103,265,913	20	55,197,952	27	70,234,775	
1967	198,712,000	197,457,000			101,965,984	11	32,944,013	26	66,971,177	
1966	196,560,000	195,576,000			100,549,013	10	31,096,697	24	61,894,847	
1965	194,303,000	193,526,000	1914		99,117,567			24	60,963,309	
1964	191,889,000	191,141,000			97,226,814			23	58,156,740	
1963	189,242,000	188,483,000			95,331,300			22	54,847,700	
1962	186,538,000	185,771,000	1911		93,867,814			22	53,929,644	
1961	183,691,000	182,992,000			92,406,536			20	47,470,437	
1960	179,933,000	179,323,175			90,491,525			18	44,223,513	
1959	177,264,000	176,513,000	1908		88,708,976			17	38,634,759	
1958	174,141,000	173,320,000			87,000,271			15	34,552,837	
1957	171,274,000	170,371,000	1906		85,436,556			15	33,782,288	
1956	168,221,000	167,306,000			83,819,666			10	21,767,980	
1955	165,275,000	164,308,000			82,164,974			10	21,332,076	
1954	162,391,000	161,164,000	1903		80,632,152			10	20,943,222	
1953	159,565,000	158,242,000			79,160,196			10	20,582,907	
1952	156,954,000	155,687,000			77,585,128			10	20,237,453	
1951	154,287,000	153,310,000	1900		76,094,134			10	19,965,446	

<sup>- - -</sup> Data not available.

SOURCE: Published and unpublished data from the U.S. Bureau of the Census; see text and table D.

<sup>...</sup> Category not applicable.

<sup>1/</sup> Alaska included beginning 1959 and Hawaii, 1960.

<sup>2/</sup> The District of Columbia is not included in "Number of States," but it is represented in all data shown for each year.

<sup>3/</sup> Population projected from the 1990 Census.

Table 4-2. Estimated total population by specified Hispanic origin and estimated female population by age and specified Hispanic origin and by race for women of non-Hispanic origin: United States, 2001

[Populations estimated as of July 1]

			Hispanic				Non-Hispanic				
Age	Total	Mexican	Puerto Rican	Cuban	Other Hispanic 1/	Total 2/	White	Black			
Total population	36,972,219					247,824,668	198,036,588	35,629,549			
Female population											
15-44 years	8,872,357					52,800,344	40,652,518	8,566,914			
10-14 years	1,645,512					8,539,686	6,413,270	1,617,050			
15-19 years	1,503,868					8,340,113	6,337,392	1,477,675			
15-17 years	892,070					5,000,420	3,803,604	890,470			
18-19 years	611,798					3,339,693	2,533,788	587,205			
20-24 years	1,580,956					8,038,274	6,056,019	1,421,177			
25-29 years	1,622,931					7,710,278	5,762,492	1,313,060			
30-34 years	1,540,556					8,719,969	6,686,569	1,392,172			
35-39 years	1,418,573					9,719,751	7,605,075	1,490,954			
40-44 years	1,205,473					10,271,959	8,204,971	1,471,876			
45-49 years	958,473					9,585,646	7,766,096	1,278,267			

<sup>---</sup> Data not available.

SOURCE: National Center for Health Statistics. Estimates of the July 1, 2001, United States population by age, sex, race, and Hispanic origin. Washington, DC: U.S. Census Bureau. 2002.

<sup>1/</sup> Includes Central and South American and other and unknown Hispanic.

<sup>2/</sup> Includes races other than white and black.

Table 4-3. Estimated population of the United States, by age, race, and sex: July 1, 2001

[Figures include Armed Forces stationed in the United States but excludes those stationed outside the United States]

Age		All races			White			Black		P	merican India	n	Asian	and Pacific Isla	nder
Age	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	284,796,887	139,813,108	144,983,779	232,351,696	114,659,071	117,692,625	37,196,779	17,710,410	19,486,369	3,054,311	1,524,362	1,529,949	12,194,101	5,919,265	6,274,836
Under 1	4,033,748	2,064,258	1,969,490	3,145,068	1,609,133	1,535,935	651,438	333,991	317,447	57,350	29,296	28,054	179,892	91,838	88,054
1-4 years	15,335,593	7,841,024	7,494,569	11,950,518	6,124,281	5,826,237	2,484,818	1,263,494	1,221,324	214,450	109,200	105,250	685,807	344,049	341,758
5-9 years	20,184,052	10,336,616	9,847,436	15,672,696	8,043,297	7,629,399	3,376,928	1,715,921	1,661,007	283,566	143,588	139,978	850,862	433,810	417,052
10-14 years	20,881,442	10,696,244	10,185,198	16,279,358	8,354,582	7,924,776	3,440,783	1,746,075	1,694,708	304,032	154,209	149,823	857,269	441,378	415,891
15-19 years	20,267,154	10,423,173	9,843,981	15,951,898	8,227,850	7,724,048	3,139,156	1,594,670	1,544,486	289,027	147,933	141,094	887,073	452,720	434,353
15-17 years	12,117,326	6,224,836	5,892,490	9,537,142	4,911,692	4,625,450	1,892,936	962,695	930,241	174,739	88,981	85,758	512,509	261,468	251,041
18-19 years	8,149,828	4,198,337	3,951,491	6,414,756	3,316,158	3,098,598	1,246,220	631,975	614,245	114,288	58,952	55,336	374,564	191,252	183,312
20-24 years	19,681,213	10,061,983	9,619,230	15,521,549	8,007,393	7,514,156	2,933,423	1,438,129	1,495,294	254,247	131,897	122,350	971,994	484,564	487,430
25-29 years	18,926,104	9,592,895	9,333,209	14,935,220	7,666,153	7,269,067	2,646,872	1,262,075	1,384,797	226,227	116,961	109,266	1,117,785	547,706	570,079
30-34 years	20,681,202	10,420,677	10,260,525	16,553,199	8,437,327	8,115,872	2,773,000	1,312,228	1,460,772	225,433	114,708	110,725	1,129,570	556,414	573,156
35-39 years	22,243,146	11,104,822	11,138,324	18,013,342	9,091,759	8,921,583	2,931,674	1,379,113	1,552,561	238,212	118,958	119,254	1,059,918	514,992	544,926
40-44 years	22,775,521	11,298,089	11,477,432	18,693,104	9,369,388	9,323,716	2,871,426	1,347,741	1,523,685	231,189	112,908	118,281	979,802	468,052	511,750
45-49 years	20,768,983	10,224,864	10,544,119	17,233,171	8,577,202	8,655,969	2,463,325	1,143,642	1,319,683	198,121	96,167	101,954	874,366	407,853	466,513
50-54 years	18,419,209	9,011,221	9,407,988	15,500,041	7,662,704	7,837,337	2,008,644	923,827	1,084,817	162,106	78,924	83,182	748,418	345,766	402,652
55-59 years	14,190,116	6,865,439	7,324,677	12,140,638	5,928,397	6,212,241	1,418,669	639,265	779,404	114,255	55,283	58,972	516,554	242,494	274,060
60-64 years	11,118,462	5,288,527	5,829,935	9,518,392	4,568,329	4,950,063	1,116,657	491,671	624,986	83,012	40,029	42,983	400,401	188,498	211,903
65-69 years	9,532,702	4,409,658	5,123,044	8,229,353	3,847,282	4,382,071	926,216	393,537	532,679	61,319	28,376	32,943	315,814	140,463	175,351
70-74 years	8,780,521	3,887,793	4,892,728	7,740,099	3,463,574	4,276,525	743,103	297,077	446,026	45,133	20,298	24,835	252,186	106,844	145,342
75-79 years	7,424,947	3,057,402	4,367,545	6,635,075	2,751,269	3,883,806	575,777	215,224	360,553	31,819	13,327	18,492	182,276	77,582	104,694
80-84 years	5,149,013	1,929,315	3,219,698	4,653,605	1,753,044	2,900,561	369,204	124,597	244,607	19,055	7,258	11,797	107,149	44,416	62,733
85 years +	4,403,759	1,299,108	3,104,651	3,985,370	1,176,107	2,809,263	325,666	88,133	237,533	15,758	5,042	10,716	76,965	29,826	47,139

SOURCE: National Center for Health Statistics. Estimates of the July 1, 2001, United States population by age, sex, race, and Hispanic origin. Washington, DC: U.S. Census Bureau. 2002.

Table 4-4. Estimated total population and female population aged 15-44 years: United States, each division, State, and territory: July 1, 2001

[Figures include Armed Forces stationed in each area and exclude those stationed outside the United States]

Division and States	Total	Female 15-44 years
United States	284,796,887	61,672,701
New England		
Maine		
New Hampshire Vermont		
Massachusetts		
Rhode Island		
Connecticut		
Middle Atlantic		
New York New Jersey		
Pennsylvania		
East North Central		
Ohio		
Indiana		
Illinois Michigan		
Michigan Wisconsin		
West North Central		
Minnesota		
lowa		
Missouri		
North Dakota South Dakota		
Nebraska		
Kansas		
South Atlantic		
Delaware		
Maryland		
District of Columbia Virginia		
West Virginia		
North Carolina		
South Carolina		
Georgia Florida		
East South Central		
Kentucky		
Tennessee		
Alabama		
Mississippi		
West South Central		
Arkansas Louisiana		
Oklahoma		
Texas		
Mountain		
Montana		
Idaho		
Wyoming Colorado		
New Mexico		
Arizona		
Utah		
Nevada		
Pacific Washington		
Washington Oregon		
California		
Alaska		
Hawaii		
Puerto Rico		
Virgin Islands		
Guam American Samoa		
Northern Marianas		

<sup>---</sup> Data not available.

SOURCE: National Center for Health Statistics. Estimates of the July 1, 2001, United States population by age, sex, race, and Hispanic origin. Washington, DC: U.S. Census Bureau. 2002.